

A COMPUERVE PUBLICATION PRINTED MONTHLY/ONLINE DAILY

# ONLINE

T O D A Y

THE COMPUTER COMMUNICATIONS MAGAZINE

September 1988 \$2.50


## CONTINUING EDUCATION

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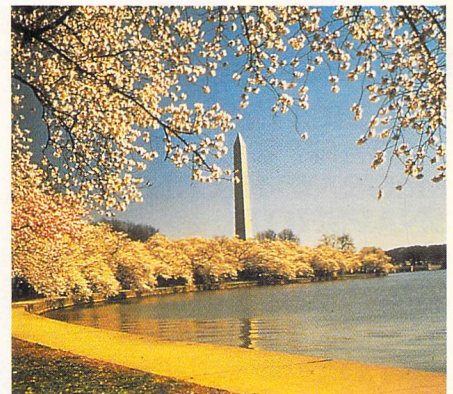
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## Too Hot to Print

Catch computer industry news as it happens, keep up with online events, read special reports, commentary and more product reviews. You'll find it only in *Online Today Daily Edition*, a daily-updated newspaper full of information that's too hot to print. GO OLT.

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### Medical Information

I am a pharmacist specializing in the area of drug information and work in a busy 650-bed community hospital.

I frequently use several of the popular sources of medical information (e.g., National Library of Medicine's Medline, PaperChase, etc.) but have found the National Organization of Rare Diseases (NORD) section of CompuServe to be invaluable. Recently, I received a call late one Friday afternoon from a physician who had admitted a patient to our hospital. He was in the process of ordering laboratory work to determine if the patient might have a relatively rare abnormality in the clotting system. He asked if anyone manufactured the particular clotting factor the patient might be lacking. I promptly accessed NORD through CompuServe and ascertained that three pharmaceutical companies were conducting clinical investigations into the use of the clotting factor (antithrombin III). I called one of them and learned that I would be able to obtain an emergency supply of the medication, if the patient proved to have the disorder.

Without this valuable service provided through CompuServe, I would not have been able to obtain this information and relay it to the physician.

Alan Barreuther  
Tucson, Ariz.

### Telephone Savings

T.L. McCormick's letter concerning telephone rates in the *Online Today* May issue prompted me to do my own research. I live in a rural area of Vermont and was accustomed to accessing CompuServe through a Burlington, Vt., telephone number in my own area code (802). To my surprise, I found that McCormick's assertion is correct—it is much cheaper for me to access CompuServe through a telephone number in Nashua, N.H., via area code 603. Just how *much* cheaper was the best news of all! Using my own area code during standard day rate hours, the charge is 65 cents for the first minute and 34 cents for each additional minute of connect time. Using the 603 area code, the charges are 29 cents and 21 cents, respectively. Savings are almost as great for evening and night rates. Thanks to McCormick and *Online Today*!

James Tabor  
Putney, Vt.

### Mall Promotions

I think CompuServe's Mall Murder promotion was in poor taste. Since a promotion is intended to promote, you should know that at least one subscriber finds this gimmick, complete with gore-dripping logo, a turn-off. There must be more wholesome ways to induce people to shop.

Bill Gardner  
Kowloon Bay, Hong Kong

### Multi-tasking

I have to disagree with Don Curtis' letter in the May issue of *Online Today* where he states that the Amiga is "the only personal computer that has been able to do multi-tasking for years." The Professional 300 series from Digital Equipment Corp., based on the LSI-11 chip, runs essentially the same RSX operating system that PDP-11s have run for years, and, as such, does complete multi-tasking. Although not a well-supported series of machines, the Professionals have been available for several years and are classified as personal computers. (There is a DEC PC forum on which users can exchange information on this series.)

Roger Vanderveen  
Santa Clara, Calif.

### Send a Letter

- OLT-30** **Letters to the Editor** *main menu. Lists all departments.*
- OLT-31** **Send a letter instructions.** *Complete instructions on how to send a letter to the editor via the electronic service.*
- OLT-32** **Read letters from other OLT readers.**
- OLT-33** **Send a letter to the editor.** *You will receive prompts for each step in the process. Important Note: We cannot answer questions regarding the CompuServe Information Service through this service. If you have questions or problems, please use the Feedback service (GO FEEDBACK).*

# FREE Listing

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In the past few years more attention has been focused on "continuing education." Many colleges and universities offer some type of continuing education program for post-graduates. More people are taking time out to go back to school to take a class for personal reasons, or to catch up on advances in their professions.

In the "continuing education" rush, many have discovered that extending a formal education isn't always a formal process and it doesn't always mean attending a class.

From Alaska's remote North Slope to the heart of Manhattan, online services are gaining wider recognition as valuable paths to lifelong education and personal enrichment for people of all ages. Hundreds of CompuServe services are helping thousands of subscribers to attain new knowledge and skills. From IQuest's 800 research databases to educational forums to comprehensive news services to interactive forums, each is opening up new opportunities that may have been closed to people because of geography, time or resource limitations.

Reading this month's cover feature on "Continuing Education" (beginning on page 15) may spark some ideas about expanding your own horizons through the interactivity of online computing.

\* \* \*

If you're an investor, be sure to turn to this month's Business/Investing section where you'll find tips on researching undervalued stocks (page 10). Find out how to make short work of screening more than 10,000 stocks for those undervalued gems being sold at a price under profit potential by companies that have been ignored by investment institutions and security analysts.

Also, the forum administrator of CompuServe's investment forum has a few tips on getting inside information on over-the-counter stocks using online screening programs, insider newsletters and source document searches. For more, turn to page 12, "Selecting OTC Stocks."

\* \* \*

*Online Today* is now into its eighth year of publication, and this is our 75th issue. As always, we're striving to make the magazine more useful to CompuServe subscribers. Let us hear from you on how we can improve: GO OLT-30 for our feedback section or GO OLTFORUM to reach the *Online Today* Readers Forum. We welcome your cards and letters, too.



Douglas G. Branstetter  
Editor

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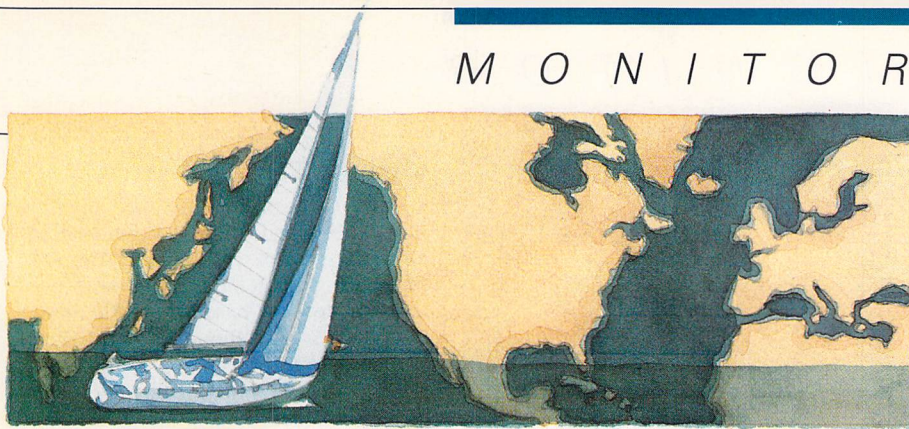
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Students follow the expeditions through weekly updates available in the Sailing Forum (GO SAILING). Generally, no voice communication between the sailors and the mainland is possible, although several expeditions have held online conferences in the Sailing Forum from such exotic locations as Sidney, Australia, and Rio de Janeiro, Brazil.

Mame Reynolds, the coordinator of the SOC, says the armchair adventures have proven especially popular with children who are gifted or have special needs.

"By tracking an explorer or vessel, students become aware of the world around them. Not only are they learning geography, but they also are getting a lesson in politics and economics. And they are asking about the values and goals of the sailors," she says.

Teachers who would like their classes to participate in this year's Student Ocean Challenge can contact Mame Reynolds in the Sailing Forum (GO SAILING) at CompuServe User ID number 73647,3122 or at Newport School Department Administration Building, Mary Street, Newport, RI 02840; 401/847-RACE.

—Cathryn Conroy

## Students Sail Through Classroom Project

Many people dream of sailing around the world. With the Student Ocean Challenge and CompuServe, grade-school children can make their salt-water dreams more real.

A program of the Newport, R.I., Museum of Yachting, the Student Ocean Challenge is a classroom project designed to spark students' interest in sailing and the sea, the spirit of adventure, the global environment and maritime history.

Each year, 20,000 students in the second through eighth grades and 300 teachers worldwide focus on a different yacht race or sea voyage. This past school year, the students tracked the

USCGC Eagle as the 296-foot baroque sailed from New London, Conn., bound for Australia, then visiting Honolulu, Seattle, San Francisco, Los Angeles, Acapulco, Panama and Miami before returning home.

The students also followed Ned Gillette, who ventured on a rowing expedition to Antarctica. This 42-year-old mountaineer and Olympic cross-country skier led a team of four men who began their journey from Cape Horn aboard the 28-foot ocean rowing boat, Sea Tomato. The 1,000-mile trip, which had never before been attempted, took just 14 days.

Information on the adventurers' locations is transmitted from an on-board transponder to a satellite and is then transmitted to earth stations.

## Encourage Equal Computer Education

Although you never actually see school computers draped with signs warning "No girls allowed," they might as well be. Studies show that once girls enter middle or high school, their computer use and willingness to learn new and creative applications dissipates.

Teen-aged girls spurn computers because they think the machines are unfeminine or "nerdy," according to an Education Forum conference on the topic. Because they usually see men using computers—from Dad balancing the checkbook at home to the programming teacher at school to magazine and television advertisements for computers—girls are getting the not-so-subtle message that computers are for males.

Convincing a 14-year-old girl of the importance computers will play in her higher education and career is a challenge. Education Forum members, many of whom are teachers, give the following advice to parents who want to encourage their daughters' creative computer use:

- Girls need positive same-sex role models. Mom should also use the

home computer. In addition, encourage your local school to hire a woman to teach programming or to advise the computer club.

- Encourage your school to set challenging computer literacy standards and requirements for all students that include not only word processing but also database management and spreadsheet operation. Many teachers say that girls do not voluntarily tackle the tougher applications, but they do well when it becomes a class requirement.
- Show your daughter how computers are used by women in a variety of fields. For instance, if she wants to be a fashion designer, show her how designers use computer-aided design in their work.
- Help your daughter to realize that developing computer skills is "proper," socially acceptable feminine behavior.
- And if all else fails, remember that the computer skills she learned before she became 13 years old are not forgotten. That early training will not be lost while you let her explore other areas for a while.

## Robot Controller Outsmarts Humans

A Japanese firm has developed a robot controller that runs on parallel analog circuits.

Omron Electronics says its new general-purpose controller can process at speeds up to 1,000 times faster than current computers used in robots. The FZ-1000 controls industrial robots, and Omron says it can operate sophisticated automated devices better than the most-experienced human operators.

The FZ-1000, known as a "fuzzy" controller, is able to interpret imprecise data because of firmware that operates through a knowledge-based system. As many as 20 firmware boards can be programmed and linked together in parallel circuits. According to the manufacturer, the controller surpasses human operators because it can draw up to 1 million inferences per second with its circuits.

On CompuServe, robotics and artificial-intelligence issues are discussed in the AI Expert Forum (GO AIE-100).

—James Moran



## Electronic Professor Makes the Grade

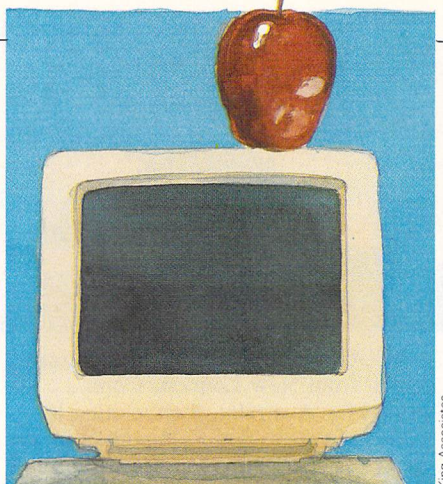
Penn State University professor Gerald M. Phillips describes his home office as the "bridge of the Starship Enterprise." Equipped with computers, modems and sundry high-tech equipment, Phillips' office is also the only link many of his students have with him. In fact, students who missed the first class do not even know what he looks like.

Phillips is pioneering new ground in education with his Speech Communications 350 class, which he teaches via electronic mail. Weekly lectures are conducted by graduate associates Rob McKenzie and Nancy Ross, but the bulk of the work is completed by computer.

The goal of the class is to teach group problem-solving. Phillips says that in the "old days" he would divide the class into groups, give them a problem to solve, critique their work and watch them forget everything they learned. He wanted to develop a teaching method that would help students to retain their knowledge and take it into the business world when they graduated.

With the assistance of Jerry Santoro, a Penn State microcomputer applications expert, Phillips designed an electronic course that "worked like gangbusters" the first time he taught it in the spring of 1987. "It gave us the kind of interchange we needed so we could be available to provide information."

Students are taking advantage of Phillips' knowledge. He answered—electronically—more than 6,000 questions when he taught the class of 212 students this past spring, and his graduate assistants took on another 4,000 each. "Some of the questions are specific, others represent a kind of business dialogue, while still others are the



King Associates

kind of questions a lot of students worry about but never ask in a traditional classroom setting. When I get a good question, I copy it and send it to everyone in the class."

Phillips structures the course as if it were a business organization, with himself as the chief executive officer, to give the students a taste of the real world. "I can monitor everything. They know I'm monitoring. I'm the CEO. I can get all the information on my company. We've got a real industrial model—a simulation of top management, middle management and employees."

He is confident the method is working well. "Out of 24 group reports, I gave 19 A's," he says, noting that he did flunk one group.

The students are generally pleased with the structure, although some dislike not seeing their professor face-to-face. Almost all, though, are impressed with what they learn and appreciate the computer skills they pick up.

For information, contact Gerald M. Phillips, 1212 S. Pugh, State College, PA 16801; 814/238-2943 or 814/865-3461.

—Cathryn Conroy

## Fast Ultracomputer Makes Its Debut

A Japanese government laboratory announced the successful test of an ultracomputer that processes information almost twice as fast as existing supercomputers.

The Electrotechnical Laboratory of the Agency of Industrial Science and Technology says it has developed a parallel processing computer. All of the research and testing was completed under the auspices of the Japanese Ministry of International Trade and

Industry.

The unnamed ultracomputer may soon be surpassed by other machines now in development at the Electrotechnical Laboratory. Building upon the current model but using faster circuitry, yet-to-be-completed research models are expected to process up to 400 times faster than the computer just announced.

CompuServe users can learn of the latest computer developments by reading *Online Today Daily Edition* (GO OLT).

—James Moran

## Getting There

Getting passengers to their destinations safely and on time should be an airline's primary goals. American Airlines is trying to improve its on-time record with a PC-based air-traffic model.

The program, Simmod, helps the Fort Worth, Texas-based company spot potential traffic bottlenecks and schedule flights accordingly. Simmod has proved so effective that American Airlines makes few scheduling or system expansion decisions without first consulting the program.

"It's a critical planning tool," says Tom Cook, the company's managing director of operations research. "Simmod lets us know if we can expand operations at a particular hub city. If we can, it also tells us at what point we can experience gridlock in the system."

Eventually, Cook notes, Simmod will be offered through the Federal Aviation Administration as a public-domain program. American Airlines is using a pre-released version of the program, which is being developed by several systems houses under the auspices of the FAA.

In the meantime, American Airlines is marketing its Simmod expertise to other airlines around the world. The company has already helped the Spanish and Swedish national airlines organize their flight schedules.

CompuServe members can access airline schedules and fare information and make reservations online with American Airlines Eeasy Sabre (GO EAASY SABRE).

## Get Computer Industry News

*Online Today Daily Edition's* Monitor section keeps you abreast of the latest computer and information industry news. Stories are added several times each day and the hot items are highlighted on our front page, OLT-1. A week's worth of recent news is always available for review (OLT-20). To read today's news, type GO OLT-90 at any CompuServe Information Service prompt.

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## See It Now

Seeing something with your own eyes is often the best way to learn, which is why Sunbelt Technology and Texas Technical University have developed The Computing Technology Videodisc, the first visual database on computers and related systems.

Designed specifically as a teaching resource for courses in data processing, computer science, computer literacy

and educational computing, the videodisc contains more than 1,000 still visuals and approximately 20 brief video motion segments dealing with all aspects of computer technology.

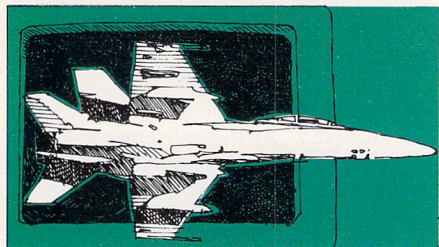
The videodisc allows up to 54,000 high-quality visual images to be stored on each side of an optical disk, similar to the popular audio compact disks. All parts of the program can be quickly accessed at random. Motion sequences can be shown in high-quality slow mo-

tion, fast motion and still-frame modes.

The videodisc can be used independently of or in conjunction with any computer as part of individualized computer-assisted instruction. It sells for \$199.

For information, contact Sunbelt Technology, P.O. Box 4447, Texas Tech University, Lubbock, TX 79409; 806/742-2362.

—Cathryn Conroy



## How to Use Your F-15

In an effort to cut costs associated with complex weapons systems, the Pentagon's documentation and user guides will be produced by computerized publishing systems starting next year.

Contractors currently charge the Defense Department about \$300 per page to make changes in a weapons systems' documentation. Last year, about 500,000 pages were changed in the documentation for F-15 and F-18 fighter planes, costing the government roughly \$150 million.

David Henry Goodstein, president of Interconsult, a large consulting firm based in Cambridge, Mass., notes that in addition to saving the government money, computerized publishing systems will help keep the manuals more up-to-date.

"Under the old system, as much as 25 percent of military documents are out of date at any time," says Goodstein. "Keeping information in consistent electronic form will make revisions easier and eliminate mistakes from retyping correct information."

However, like all things in Washington, saving money doesn't come inexpensively. The Defense Department expects the new system to cost about \$2 billion over the next five years.

Among the companies scrambling to develop or redesign products that meet the Pentagon's new requirements are IBM, Xerox, Kodak, Digital Equipment Corp. and Xyvision.

—John Edwards

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*How to Get The Most Out of CompuServe***Taking Command with Codes**

by Charles Bowen and David Peyton

Commands we've talked about so far have had distinct functions that have enabled us to put them into two specific groups:

- *Navigation* commands, which can take you on long or short hops across the system, such as GO to reach a specific page address, T to return to the top of the system and M to reach a previous menu.
- *Display* commands, which cause CompuServe to display items found on those menus, such as S to continuously scroll selected items and R to redisplay the current menu.

In addition, a third group of functions exists that we can think of as *systems* commands. In a sense, it is a grab-bag category, containing commands for a wide range of operations. Nonetheless, systems commands share at least one characteristic: unlike those for navigation and display, they have more general functions. Some determine how information will appear on your computer screen, setting line lengths and page sizes; others control and regulate the constant flow of information from CompuServe to your computer.

These latter systems commands are called *control codes* because they allow you to send special messages to the system to do such things as freeze the current display, restart it, interrupt it and return to a prompt.

Compared with most commands, control codes are entered in an unusual way. All the commands we've seen so far require you to type a letter or word and then to press the Return key to "execute" it. Typing GO OLT-90 means nothing to the system until you press the Return key to "send" it to CompuServe. In fact, before pressing the Return key, you can even backspace over the letters and rewrite the command. CompuServe knows nothing about it until the Return key is pressed.

However, control codes are executed without the Return key. You enter any of them by holding down the keyboard's Control key, then pressing a character key. To enter a [CONTROL-S] command, you press the Control and S keys; [CONTROL-Q] is sent by pressing the Control and Q keys together. The Return key is not used because control

codes are "executed" immediately.

For those with older computer equipment, note that some keyboards do not have a Control key. If yours does not, consult the manuals that came with your computer and your communications software for an alternate key or keys to use. (Sometimes two keys are used together to signal "Control"; for instance, on the older TRS-80 Models I, III and 4, the Shift and Down-Arrow keys are pressed at the same time to indicate "Control.")

A pair of control codes—[CONTROL-S] and [CONTROL-Q]—are the most important for day-to-day use of CompuServe because together they act as a kind of brake system to slow and restart the flow of text coming to your screen. As you're reading an article online, you can enter [CONTROL-S] to temporarily freeze the display, allowing your eyes to catch up with the text. To resume the transmission of the display, press [CONTROL-Q]. Regular CompuServe users get in the habit of rocking back and forth between [CONTROL-S] and [CONTROL-Q] when reading text online.

A variation on the braking system is [CONTROL-A], which also temporarily suspends output from CompuServe. But unlike [CONTROL-S], which freezes the screen immediately, [CONTROL-A] waits until the end of the current line. If entered at the beginning of a screen line, [CONTROL-A] allows the rest of the line to display, then stops the transmission. To continue, enter [CONTROL-Q].

If [CONTROL-S], [CONTROL-A] and [CONTROL-Q] can be compared with light taps on the brake and accelerator pedals to slow and start an automobile, then [CONTROL-C], [CONTROL-O] and [CONTROL-P] are full stops.

Entered at virtually any point on CompuServe—during the running of a program or the display of text—[CONTROL-C] stops everything. It interrupts the program or display and returns you to a prompt, which often appears like this:

```
*****
^C Interrupt, H for HELP, T for TOP, M
for prior MENU!
*****
```

Think of [CONTROL-C]—which functions like the Break key in many computer programs—as the closest thing to a "panic stop" online. It tells the system, "This is not what I had in mind; stop it immediately and get me out of here!" At the subsequent system prompt, the harried user can collect his or her wits, then enter another command, such as GO and page address to go elsewhere or BYE or OFF to log off the system.

(Also notice that in messages from CompuServe, "Control" usually is symbolized as ^, as in ^C in this example.)

[CONTROL-O] is a slightly less drastic full stop. Like [CONTROL-C], it discontinues the flow of information, but does not actually stop the running of the current program. In addition, [CONTROL-O] usually does not provide an "interrupt" message. Suppose you were reading *Online Today Daily Edition* computer news (GO OLT-90) and entered [CONTROL-C] during the display of the menu. What would appear is something like:

```
*****
Online Today OLT-90
TODAY'S MONITOR NEWS
1 Entrepreneur Attempts Suicide
2 Soviet PC Deal 'Clarified'
3 AT&T Rethinks Olivetti Ties
4 Ala. Super Net Passes Test
5 Feds to Hav^C
^C Interrupt, H for HELP, T for TOP, M
for prior MENU!
*****
```

You can see that the system "heard" and reported the entering of the [CONTROL-C] just as it was displaying Option 5. It then interrupted the display, dropped down a few lines and provided the ^C Interrupt prompt, ending with the familiar ! prompt.

If in the same situation you had entered [CONTROL-O], the system would show:



\*\*\*\*\*

## TODAY'S MONITOR NEWS

- 1 Entrepreneur Attempts Suicide
- 2 Soviet PC Deal 'Clarified'
- 3 AT&T Rethinks Olivetti Ties
- 4 Ala. Super Net Passes Test
- 5 Feds to Hav'O

\*\*\*\*\*

This time the system has stopped immediately, without taking time to display a prompt. You have not actually left the *Online Today Daily Edition* area; you've simply interrupted the display. If you entered a menu number at this point, you'd be shown the articles, as if you had not entered [CONTROL-O] at all, but had instead waited for all of the menu to display.

[CONTROL-P] is a first cousin of [CONTROL-O] and [CONTROL-C], a Control code that can be used to interrupt the current menu and go immediately to the next prompt. It's handy if you know precisely where you're going and don't want to waste time reading familiar menus.

Suppose you are at the top of the system and want to read daily computer industry news from *Online Today Daily Edition*. As a regular reader, you know that GO OLT takes you directly to the "front page" of the service; and you could use Control codes such as [CONTROL-P] to get you there even faster. From the top, the system begins the display of the first menu:

\*\*\*\*\*

CompuServe

TOP

- 1 Subscriber Assistance
- 2 Find a Topic
- 3 Commu^P

^P Interrupt.

!

\*\*\*\*\*

Here you entered [CONTROL-P] right after the beginning of the top menu and the system stopped the display, acknowledged the [CONTROL-P] interrupt and gave you the prompt. At the prompt, you then could type GO OLT.

After a subsequent "One moment please" message, the system would display the publication's title page, and

then you could continue your speeding through the next menu displays:

\*\*\*\*\*

Online Today

ONLINE

## ONLINE TODAY DAILY EDITION

- 1 Guide to OLT Daily Edition
- 2 Monitor Daily News
- 3 CompuServe This Week
- 4 Columns/Sp^P

^P Interrupt.

!

\*\*\*\*\*

You entered a [CONTROL-P] right after you saw the feature you wanted: Option 2, "Monitor Daily News." Again, the menu stops and the ! prompt is given. You can then type 2 and the system continues:

\*\*\*\*\*

Online Today

OLT-160

## MONITOR DAILY NEWS

- 1 About This Section
- 2 Today's News
- 3 This Week's Ne^P

^P Interrupt.

!

\*\*\*\*\*

This time you stopped the menu because you've seen the option you want, "Today's News."

So, using systems commands such as [CONTROL-P] means you don't have to watch menus go by if you are familiar with the territory.

Other control codes have more limited functions. For instance:

- [CONTROL-H] is a backspace. When entered on the system, [CONTROL-H] backspaces, deleting the character that was there. The deleted character may not actually disappear from the screen (depending on your communications software), but it is no longer recognized by the system. For most of us, [CONTROL-H] is not necessary because most communications programs today recognize the keyboard's own backspace key for the same function.
- [CONTROL-U] deletes the line you're currently typing, assuming you haven't pressed the Return key yet. (This one is used most often in "real-time" communications of the CB Simulator and in conference mode in the discussion forums, as will be

discussed in a later column.)

- [CONTROL-V] redisplay the partial line you're typing and allows you to continue entering text. (Again, this one is most useful in CB and forum conferencing.)

A final note about using control codes: The "brakes"—[CONTROL-S], [CONTROL-Q], [CONTROL-C], [CONTROL-O] and [CONTROL-P]—work best when you're connected to the system through a direct CompuServe node rather than through a packet network such as TYMNET or Telenet. The latter networks are sometimes noticeably slower than the regular CompuServe nodes and so often take a little longer to deliver instructions to the system.

Next month we'll continue looking at systems commands, focusing on those that set special display functions. We'll also talk about what CompuServe means when it indicates that changes are "temporary" and "permanent."

*Charles Bowen and David Peyton co-authored How to Get the Most Out of CompuServe and CompuServe for the IBM PC Power Users. Bowen's CompuServe User ID number is 70007,411.*

**If you are not a  
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# Build an Investment Portfolio

## Online Services Help Find Value Stocks

by Sumner Levine

Few activities receive more attention from the financial press than strategies for making a profit in a precarious stock market. Among the most conservative and successful approaches to building a portfolio is the purchase of selected undervalued and neglected issues.

These "value stocks" are found in undervalued companies selling them at a price below their profit potential and in companies that have been largely ignored by investment institutions and security analysts. Considerable theoretical evidence suggests that eventually the market recognizes these undervalued stocks—at which point their values rise, presenting the farsighted investor an opportunity to sell them at a tidy profit. Of course, there's no guarantee that this happy turn of events will always occur, and smart investors always screen potential value stocks carefully.

COSCREEN (GO COSCREEN)—which makes it possible to screen the Disclosure II database of more than 10,000 stocks, including data from MicroQuote—makes fast work of researching potential value stocks. Available through the Executive Option, Disclosure II provides the three most recent income statements and two most recent balance sheets on each company in the database. Disclosure II also provides key financial ratios and sales and operating ratios for each of the companies' lines of business. Major shareholders are also listed for each company. This information is compiled from financial and text data from the Securities and Exchange Commission filing documents and company annual reports.

### Screening Criteria

Criteria to be used in COSCREEN to obtain names of potential value stocks include:

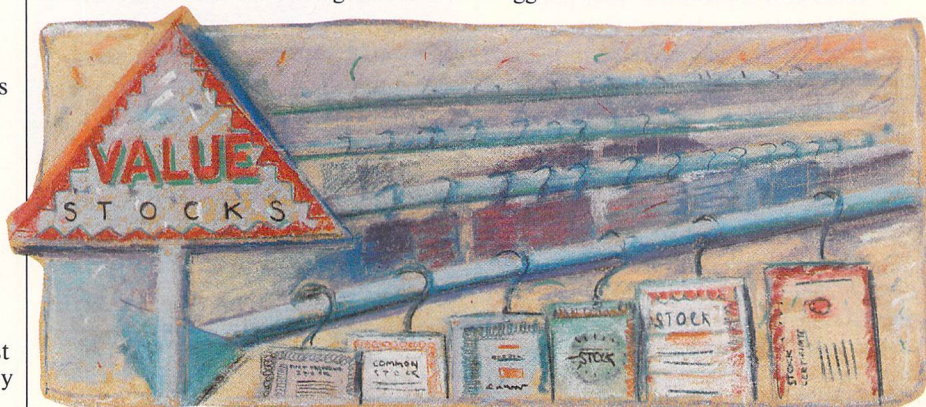
- Companies with a small price/earnings ratio, typically eight or less depending on interest rates. The P/E ratio is the current stock price divided by the annual earnings per share.
- Companies where the ratio of the price per share to the book value is about one or less. Book value is found by adding all the company's assets and then subtracting all debts

and liabilities.

- Companies whose stock is not heavily held by investment institutions and not widely followed by analysts. As a result, 10 percent or less of the stock should be held by institutions and no more than two or three analysts should be following the company's stock.

Because desired stocks are to be found in healthy companies that are undervalued and not in those on the verge of expiring, it's also important to screen for financial solvency. Two of the more commonly employed ratios for determining solvency are the debt ratio and the current ratio.

The debt ratio is the long-term debt



divided by a stockholder's equity (assets less liabilities). A value of one or less is often taken as a benchmark.

The current ratio is the current assets divided by the current liabilities. This ratio is a measure of the company's capability of meeting current debts with current resources. Preferably, this ratio should be two or greater. Profitability ratios also provide important screening criteria because they indicate how effectively a company's resources are being used. Two of the most widely used are return on assets (ROA) and return on equity (ROE). ROA is the annual profit divided by the assets. ROE is the annual profits divided by the stockholder's equity. Profitability ratios vary from industry to industry, with a typical minimal value of about 10 percent for ROA and 14 percent for ROE.

Other key screening criteria are a company's average earnings growth rate over the past four years and, if

available, the projected growth for the current year. Appropriate values depend on the industry. An often-used minimal value is 8 percent, which should be matched by a comparable growth in sales.

Even if a company has excellent financial ratios, however, it is still necessary to consider the attractiveness of the company's industry and its competitive position within the industry. Consequently, it's helpful to become familiar with the strengths and weaknesses of the company's products and services. This information can be found on CompuServe's Disclosure II (GO DISCLOSURE), Standard & Poor's (GO S&P) and Value Line Annual and Quarterly databases (GO VLINE and VLQTR).

Like novices, experienced investors also have had their share of losers, but few are foolish enough to put all their eggs into one basket. To minimize

losses, it's important to diversify your portfolio over both companies and industries so that the risk is spread over many stocks. Studies suggest that adequate diversification requires at least 10 to 15 different issues, providing the prices of these stocks don't tend to move in unison.

### A Walk Through COSCREEN

The following list of options will appear on your screen after you enter COSCREEN:

1. SIC Code
2. State
3. Total Assets
4. Book Value
5. Market Value
6. Sales
7. Net Income
8. Cash Flow
9. Latest Price
10. Four-Year Growth Rate-Sales
11. Four-Year Growth Rate-Net
12. Four-Year Growth Rate-EPS



13. Debt/Equity Ratio
14. Market/Book Ratio
15. Current Ratio
16. Return on Assets
17. Return on Equity
18. Return on Sales
19. Earnings/Share
20. Cash Flow/Share
21. Price/Earnings Ratio
22. Yield
23. Price Position
24. Price Volatility

Once a criterion is selected, for example, the P/E ratios (Option 21 on the menu), the magnitude of the criterion is specified using the operator menu.

- LT n Less than n
- LE n Less than or equal to n
- GT n Greater than n
- GE n Greater than or equal to n
- EQ n Equal to n
- NE n Not equal to n

Following the entry selection of, say, 21 LE5—which requests a screening for companies with a P/E ratio less than or equal to five—a count of the

number of companies meeting this criterion is exhibited by COSCREEN.

The list can be further screened according to a second criteria when you select the Continue to Search option on the associated menu. Proceeding this way, a succession of screening operations is carried out until the number of companies found is reduced to a manageable size. Because COSCREEN surcharges for each company received, you will want to make sure your group of companies is a small one—a list for 20 companies costs \$15.

At this point, company names, ticker symbols, sales, prices and yields are exhibited to permit further selection on the basis of sales volume or yield. For example, many value investors prefer small-to-medium size companies with annual sales in the \$50 million to \$500 million range.

After this first cut is made, you will want to take a closer look at the candidate companies. The most detailed and comprehensive database for accomplishing this is available through Disclo-

sure II. However, it is more cost effective to first check the briefer S&P database for current items.

In addition to detailed financial and product line information, Disclosure II also provides information on institutional and individual ownership, which permits screening for neglected issues. Check the I/B/E/S database (GO IBES) to see how surveyed analysts view the earnings of the company. The fewer analysts included, the less likely that information on the company is being widely disseminated—and the more likely that the company's stock is undervalued.

Taken together, Disclosure II, S&P Online and I/B/E/S provide the comprehensive information wise investors need to select and profit from value stocks.

*CompuServe subscriber Sumner Levine is on the faculty of the State University of New York, Stony Brook, and editor of the Financial Analyst's Handbook and Business and Investment Almanac (both published by Dow Jones-Irwin).*

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|--|---|



## Selecting OTC Stocks

by Mike Pietruk

Many investors intent on building sound financial futures choose to purchase stocks in growth companies. Typically, a growth company is one that is expected to increase in market value at a relatively rapid rate—usually due to sharply rising earnings.

Growth companies' stocks generally are marked by a relatively high price/earnings ratio and a low dividend yield. Although some growth stocks may be found on the New York and American stock exchanges, most are traded in the over-the-counter (OTC) market. Because the OTC market is not generally followed as closely by large investment companies, investors willing to do their own research attempt to buy in ahead of the crowd.

However, those who consider purchasing OTC stocks should first investigate them thoroughly, according to Eric McKissack, director of research for the Ariel Growth Mutual Fund. "The savvy investor must be able to weed out the potential winners from the thousands of issues traded," he says.

"For our mutual fund, we look for firms selling at low price-to-earnings ratios. We also look for a track record of consistent earnings with a strong brand or service franchise in its industry."

One way to find these quality stocks is through an online screening program called COSCREEN (GO COSCREEN). COSCREEN searches fundamental financial data from the Disclosure II database, which has files on approximately 10,000 companies. Because this search is combined with MicroQuote II's previous day closing prices on common stocks, COSCREEN is able to provide the most up-to-date information available.

The search may be performed on any or all of 24 fundamental or price parameters. At each step, there's an opportunity to display the target list of companies, redo the previous step or begin again. Because of this feature, there is ample opportunity to add or delete companies and customize your report as you go. No surcharges are incurred until you request a display of the names of the companies selected. Help is offered as you screen the companies, including definitions of all parameters and suggested values you might want to use.

Let's take the hypothetical case of an investor who is not interested in

start-up companies or those losing money, and who limits the search to stocks priced between \$15 and \$30 a share. First, the investor asks COSCREEN to eliminate all firms with sales or net income below \$10 million. A second screening criteria searches for firms with a market capitalization of greater than \$150 million earning greater than \$1 per share.

Because analysts stress the importance of earnings growth, the investor requests to see only those companies showing earnings growth of more than 25 percent for the last four years. The investor is interested only in financially solvent companies that clearly can pay their current bills, so any firm with a current ratio less than 2 is also eliminated from the search. (Even more specific information is available through COSCREEN, including data on desired debt/equity ratios, price performance, cash flow, asset measures and sales growth.)

Based on these criteria, COSCREEN narrows the field to eight companies. The investor then requests that ticker symbols for these firms be saved in a ticker file to be stored in a MicroQuote personal file area. The total surcharge for the listing of these eight companies is \$4.

To learn more about one of the eight companies listed, Sealright, the investor accesses S&P Online (GO S&P), a database maintained by Standard & Poor's, one of the nation's leading stock market research firms. S&P Online provides profiles of approximately 4,700 companies, including business summaries, recent market activity and dividend information. Product line summaries and earnings estimates are also included for many of the firms listed.

From S&P Online, the investor learns that Sealright makes containers and packaging materials primarily for ice cream producers. The product line table shows how sales are distributed among the company's various product types for the preceding two years. The remainder of the profile includes earnings, dividend and stock price performance statistics for the last four years, along with key current ratio, long-term debt and book value numbers, to provide a feel for Sealright's balance sheet. All the information about Sealright was furnished through S&P Online for a \$1 surcharge.

S&P Online makes it a snap for the investor to compare Sealright's performance with 12 other firms in the con-

tainer industry. From a single menu, the investor can enter the appropriate industry classification code (included in the Sealright reports).

Another useful database for investors tracking growth stocks is OTC NewsAlert (GO OTCNEWS). This searchable database contains more than six months of news on OTC stocks, as well as a wealth of information about the market itself. The two major categories in this database are Recent OTC News and Recent Historical OTC News. Articles remain in the Recent category for differing periods, depending on the type of story, but all articles in the database may be retrieved when searched by company name or ticker symbol. Recent articles provide an overview of the OTC market and a prelude to additional research.

Also in OTC NewsAlert are filings of certain documents with the Securities and Exchange Commission, new issues of securities (also called initial public offerings, or IPOs) by the company requested, or a new appearance or disappearance of a firm from the OTC marketplace. Internal decisions that may affect stock prices are also often disclosed. Data is also available on new products and sales contracts, both factors that can determine the direction in which a small company will move.

OTC NewsAlert also contains earnings and financial performance summaries, important legal matters and details of acquisitions. Any of these items can have a significant effect on the price movements of a company's stock. There is a \$15 per hour surcharge for accessing OTC NewsAlert.

Finally, for investors seeking even more detailed financial, business and ownership information, Disclosure II (GO DISCLOSURE) contains excerpts from source documents from more than 10,600 corporations. Many of the records filed here are the reports firms are required to file with the SEC. Charges for accessing Disclosure II vary with the report requested and the number retrieved. For a complete price list, type GO FINHLP.

With the aid of these four services—COSCREEN, S&P Online, OTC NewsAlert and Disclosure II—conscientious investors can, to a degree never before possible, educate themselves about viable long-term investment opportunities.

*Mike Pietruk is a forum administrator of CompuServe's Investors' Forum and an assistant vice president of Preferred Savings & Loan in Chicago. His CompuServe User ID number is 76703,4346.*



## Business Briefs

### News-A-Tron Adds Coverage

News-A-Tron has expanded its coverage of financial instruments on CompuServe by adding two new products, Donoghue's Money Fund Report and CD Infoline.

Donoghue's Money Fund Report can be used by investors who follow money funds. The report covers government-only, tax-free and general purpose funds, which are ranked by rates of return. CD Infoline is a bi-weekly survey of major savings and loans and banks based on the highest CD rates for \$100,000. The rates are ranked in order of highest return for 90-day and 360-day rates. GO NAT

### County Business Patterns Online

County Business Patterns, a statistical resource that identifies the number of establishments, the number of employees and annual payroll for four-digit SIC codes, is available on CompuServe.

The information is current as of 1985, and will be updated regularly by the Census Bureau. This county business information complements the state and US information, which is also online. GO CENDATA

### New Adobe Typefaces

All screen fonts from the Adobe Typeface Library packages 1 through 50 are available in the Adobe Forum.

Eight new typeface packages (Corona, Excelsior, Eurostile, Memphis, Helvetica Compressed, Lucida Sans and two Futura packages) are designed to enhance the quality and variety of the largest Postscript type library in existence.

The Adobe Typeface Library includes more than 225 unique typefaces for use with Apple Macintosh and IBM PC-based desktop publishing systems. GO ADOBE

### New NetWare Drivers Available

The 3COM 3C523 Micro-Channel Ethernet Interface Operating System and Shell Drivers are available in file 3COMM.C.ARC of the Novell Forum's Library 3.

This free file is the same program that can be ordered from Novell or 3COM for \$75. Documentation is packaged with the drivers. The surcharge for the Novell Forum is \$8 per hour. GO NOVFORUM



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## Utilities for Photos and Phone Calls Among Files

The libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the forum libraries in recent months. For a more up-to-date list, check the "Uploads" columns in *Online Today Daily Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. New columns are added weekly.

### AI EXPERT FORUM (GO AIE)

**Expert System**—A simple expert system with the addition of full Boolean expressions for attributes. The rules format is explained in the codes. Released into the public domain by author Ed King. Written under VAX VMS C but portable to other systems. File IE.C in Library 5.

### ATARI 8-BIT FORUM (GO ATARI8)

**Kermit Terminal**—John Dunning's Kermit-65 terminal program that supports a Kermit protocol, VT-100/VT-52 emulation, true 80 columns and more. File KERMIT.ARC in Library 2.

### COMMODORE COMMUNICATIONS FORUM (GO CBMCOM)

**Message Retriever**—A program for the Commodore 64 that acts as a message-retrieval service. Logs time of calls, allows the answering machine to record, then dials beeper and enters return number so you know you have had a phone call. Written in BASIC with short ML routine to print on screen using Kernal Plot. File BEEPDI.BIN in Library 11.

### CD-ROM FORUM (GO CDRUM)

**Discovery Info**—A discussion of the problems people have encountered running Discovery Systems PC Demo CD-ROM and suggestions to deal with them. The author is one of the developers of the demo disk. File PCDMO1.HLP in Library 3.

### COMMODORE MUSIC, GRAPHICS AND GAMES FORUM (GO CBMART)

**Label Printer**—A Commodore 64 utility for printing custom labels in regular or enhanced format. File LABEL.BIN in Library 10.

### CROSSTALK FORUM (GO XTALK)

**ENS Help**—A Crosstalk Mk.4 script for processing the Executive News Service clipping folders and Current/Late-breaking News folders. Automatically maintains folder retention dates. Files ENS1.ARC, ENS2.ARC, ENS3.ARC and ENSDOC.ARC in Library 4.

### DEC PC FORUM (GO DECPC)

**File Copier**—XFER, a program for MS-DOS computers that enables you to copy from a hard-disk directory to a series of diskettes. When one diskette is full, XFER prompts you to insert a new diskette. XFER copies the largest files first for the most efficient use of space. File XFER.ARC in Library 3.

### DISABILITIES FORUM (GO DISABILITIES)

**Reading Test**—Information about simple tests that can now identify reading problems in some children. File TEST2.TXT in Library 4.

### GAMERS' FORUM (GO GAMERS)

**Game Help**—Three files that list the names of Gamers' Forum members who will assist others in completing and playing the listed games. Files GAMES1.HLP, GAMES2.HLP and GAMES3.HLP in Library 16.

### GENEALOGY FORUM (GO ROOTS)

**Hyper-Tree**—A genealogy program for the Macintosh HyperCard. File HYPTRT.STK in Library 3.

### IBM NEW USERS' FORUM (GO IBMNEW)

**Baseball**—A shareware baseball game played interactively using text graphics. Uses CGA, EGA and Hercules video adapters. Monochrome or color. File BASEBL.ARC in Library 6.

### IBM SOFTWARE FORUM (GO IBMSW)

**Screen Editor**—A fast, easy full-screen editor for IBM PCs and compatibles by John D. Fox. Includes word wrap, paragraph reformat, search-and-replace, delete word, delete line, cut, paste and more. File EDIT.ARC in Library 2.

### INVESTORS' FORUM (GO INVFORUM)

**Tekstock**—A useful starter technical-analysis program for IBM PCs and compatibles. Includes built-in scripting abilities to access CompuServe, Dow Jones News Retrieval or Warner. Includes moving averages, oscillators, volume studies and relative strength.

Files TEKSTK.ARC and TEKDOC.ARC in Library 1.

### MAUG APPLE II/III FORUM (GO APPLTWO)

**Virus Detector**—A software virus detector program. File RX.BNY in Library 1.

### MAUG MAC PRO FORUM (GO MACPRO)

**MacVirus Alert**—Virus Detective is a Macintosh desk accessory for tracking viruses (or any resources) in files. Once the resource is found, it can optionally be removed from the file. Shareware. File VIRDET.BIN in Library 5.

### MAUG MAC FUN FORUM (GO MACFUN)

**Hacker Map**—A complete map for the game *Hacker II*. File HACKER in Library 4.

### PHOTOGRAPHY FORUM (GO PHOTOFORUM)

**Photographer's Assistant**—Utilities that produce depth of field charts, required parameters for desired depth of field criteria, composite guide numbers for using dissimilar flash units together, and a table of various guide numbers for single electronic flash units. All charts and output produced can be printed. File PHOTAS.ARC in Library 17.

### PUBLIC RELATIONS AND MARKETING FORUM (GO PRSIG)

**Desktop Conference**—Transcript of a conference with Don Picard, noted expert on desktop publishing and a columnist for *Link-Up* magazine, who discusses new developments in desktop publishing. File PICARD.407 in Library 3.

### SCIENCE FICTION AND FANTASY FORUM (GO SCI-FI)

**Warp Factor**—For "Star Trek" fans, an explanation of the relationship between warp factors and velocity and between the warp scale on the classic "Star Trek" episodes and the new "Star Trek: The Next Generation." File WARPTE.TXT in Library 2.

### SCUBA FORUM (GO DIVING)

**Superior Wrecks**—A textfile describing shipwrecks in Lake Superior, including coordinates. File SUPERI.OR in Library 3.

David Peyton co-authored How to Get the Most Out of CompuServe and Advanced CompuServe for IBM PC Power Users. His CompuServe User ID number is 76703,244.



# GOV'TING EDUCATION

by Randy Rendfeld

Todd Paris teaches in a rural Alaskan school district that he says is the size of Michigan, yet it contains only 530 students.

"Just two of the sites are accessible by road," Paris explains. "You must fly or travel on the Yukon, Tanana or

## *Build Your Knowledge With Online Tools*

Koyukuk rivers to get to the other villages. Dog-team and snow-machine travel are common in winter." Paris logs onto CompuServe from Nenana, Alaska, where he teaches journalism and desktop publishing to Athapascan students.

"One of my main objectives is to convey the concept that even though these kids live in the middle of 'nowhere,' they can still be tied in with what's happening anywhere else in the world," he says. "No matter how remote they are, if they have a computer and a phone, they can have access to unlimited information."

Paris occasionally gathers a group of students around his Macintosh and logs onto CompuServe. He says his students are particularly drawn to The Electronic Mall®, because retail outlets are scarce in rural Alaska. They also like CompuServe's travel services and the idea of booking Caribbean cruises.

"It's a strange dichotomy working with exciting new technology and kids who fish the Yukon River for subsistence and depend on moose meat to get through the winters," he says. "Most of my students are interested in computers and are catching on to what the new technology can do for them."

Paris plans to apply some of the HyperCard stacks he has downloaded for the Macintosh to his curriculum. During the 1988-89 school year, he and his students will be online researching such topics as the Alaska Native Claims Settlement Act of 1971 and regulations concerning subsistence hunting and fishing on public lands.

### **Research Tool and Idea Exchange**

Although most teachers and students who turn to CompuServe may not log on from the distance Paris does, many are expanding their classrooms. Some are using IQuest, CENDATA, Peterson's College Guide or Book Review Digest as tools for research. Others are exchanging ideas in the Students' Forum, the Education Forum and others.

If CompuServe had a frequent-flier program, the name of Rob Koeppel, a student at Boston's Emerson College,



would surely appear near the top of the high-mileage list. Koepfel's name does appear in Library 2 ("College Search") of the Students' Forum (GO STUFO) in a textfile called COLLEG.STU, which lists the names of older students who have agreed to discuss their colleges or universities with college-bound high school students.

Koepfel says he has visited most CompuServe forums but prefers the Association for Education in Journalism and Mass Communications Forum (GO AEJMC) for its "leisurely pace and friendly, thought-provoking members. The small size of the membership makes the forum feel like a neat, little club—but not a clique—to belong to."

Koepfel, who plans a career in the television industry, also frequents the Broadcast Professional Forum (GO BPFORUM). "While other students read about what's happening in the industry, I'm listening and talking to the people who are living it."

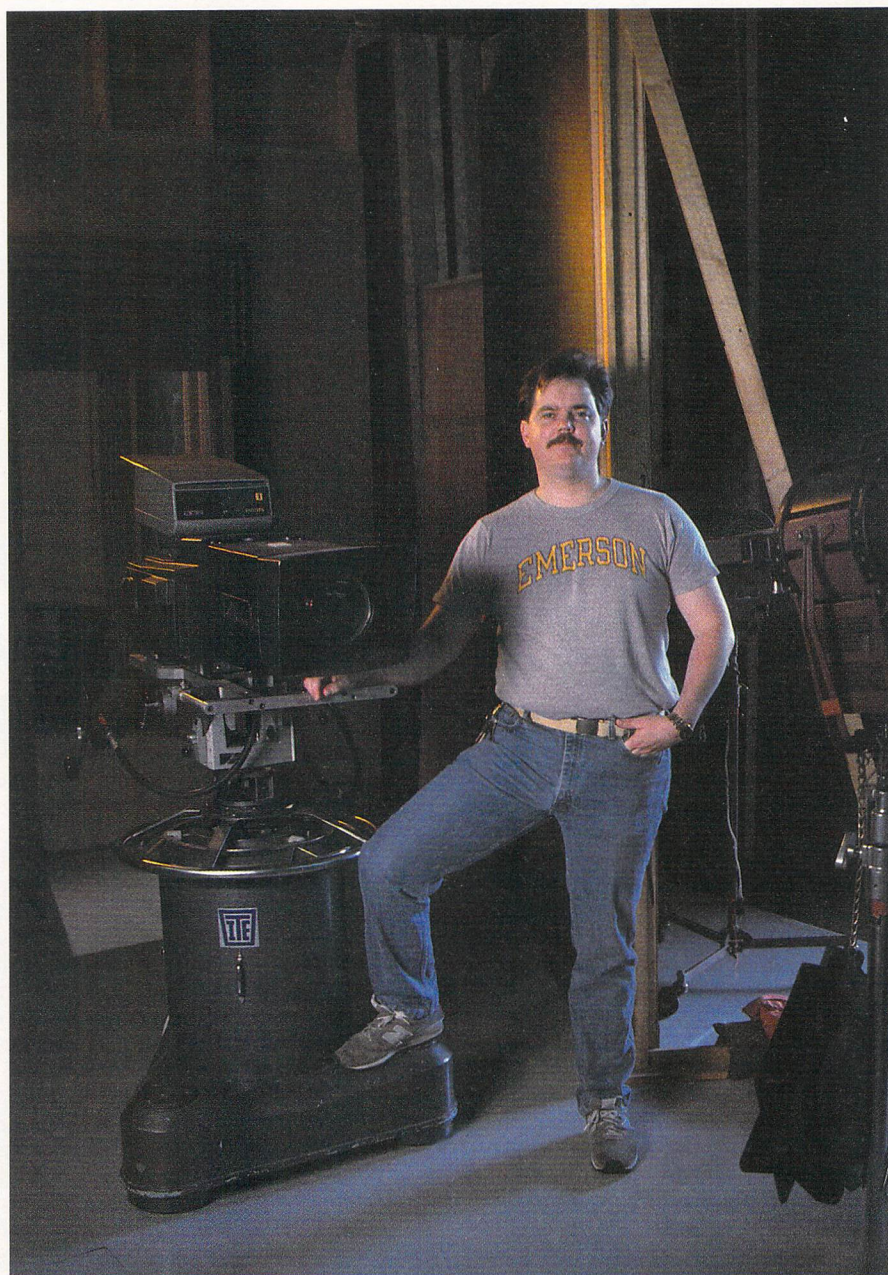
Grolier's Academic American Encyclopedia (GO AAE) has come to the aid of Koepfel and other researchers. The 21-volume, general-reference work is the first entirely new encyclopedia to be published in more than a decade. Available online on a subscription basis, it contains more than 9 million words and a database of approximately 30,000 keyword-searchable articles.

"Grolier's Encyclopedia helped me when I wanted to 'blow the mind' of a professor of modern history," Koepfel recalls. "The subject of one session was the gods of the ancient Egyptians. The night before, I searched Grolier's for the names 'Horace,' 'Set' and the rest of the gang on the Nile. The next morning, I was armed with at least 10 pages of material. I had no difficulties on the exam later that week. Although he wouldn't admit it at the time, the instructor was impressed."

Koepfel says that during the school year, his roommates and friends have talked him into searching Grolier's database for everything from great philosophers to nuclear war strategies.

## Introducing Educators to Technology

Don Wallbaum, AEJMC Forum co-administrator, describes one of his forum's purposes as introducing educators to electronic communications—educators who, "kicking and screaming, are faced with the trauma of seeing their Royal manual typewriter being hauled away." Yet their students are asking about modems, computers, bulletin board systems, online services.



Armed with online references, research is easy: Koepfel

"It is amazing to watch one of these die-hard mechanophiles log on for the first time and drop into AEJMC or the CompuServe community in general," Wallbaum says.

He says a lot of career counseling and professional development transpires in the forum. "I would like to think we have a nice balance of experience and academia, optimist and cynically disillusioned, and out of this mixture perhaps a real view of communications emerges for the student who seems to be eternally at the crossroads."

Gary Morgan, a frequent participant

in the Journalism, Public Relations, Word Perfect, Travel and AEJMC forums, is an administrator of the journalism program at California's Oxnard College. He says he's convinced the forums have made him a better educator.

"I'm also a free-lance writer," Morgan explains. "I'm co-writing a guide for the disabled with a quadriplegic woman. I would guess that, so far, about 50 percent of the usable information we've gathered has come from the Disabilities Forum (GO DISABILITIES) and the Handicapped Users' Database (GO HUD). My agent won-





Craig Wells

Frequenting forum helps school administrator to get ahead and save money: Fero

ders where we come up with all the great data."

Recently, when Time-Life Books requested an additional sample chapter on high-tech devices for the disabled, it was a simple matter for him to access CompuServe, use a keyword search in the two products for recent data and write the chapter.

#### Saving Time and Money

Morgan says he's in the final throes of acquiring his doctorate degree. IQuest is his research database of choice. He says IQuest has saved "untold hours in doing periodical research. When I measure the time saved against the price, it's worth it to me."

IQuest gives a CompuServe subscriber access to more than 800 publications, databases and indexes in business, government, research, news, sports and entertainment. Before entering IQuest, a user is presented with a menu explaining how to use the service, tips for conducting the best possible search and price information.

George Fero, a school administrator who frequents CompuServe's Educational Research Forum (GO EDRESEARCH), says his IQuest searches have helped him get ahead in his career and save money. Fero recently completed work toward a doctorate in education administration. While working on his dissertation, Fero says he used CompuServe extensively.

He began his dissertation by searching IQuest for pertinent literature. "I was able to fully control my search and get right to the meat of my topic," Fero says. Next, he went to the forums to download support software for his word processor. "This enabled me to produce my dissertation without paying for outside assistance," he says. "The bottom line is that, through the use of CompuServe, I was able to save hours of research time and about \$1,000 in typing services through the proposal, retypes and edits of my dissertation. In addition, I used these same services in assisting my wife with her graduate degree, netting the same kind of time

and a lesser amount of monetary savings."

#### Educational Pursuits

Teachers in the Educational Research Forum are finding colleagues with similar interests, conducting conferences, and exchanging and seeking feedback on articles and research, or they're learning of new developments in education at all levels, according to Jean W. Pierce, Ph.D. and forum administrator.

Some students and teachers have discovered the Census Bureau Online Service (GO CENDATA), from which they can access local, state, national and international statistics compiled by the US government pertaining to population, economy, agriculture, construction and housing, government, business, trade, transportation, education, manufacturing and other areas.

For college-bound students, Peterson's College Database (GO PETERSON) can be useful in developing plans for post-secondary education. The database contains detailed descriptions of more than 3,100 accredited or approved US and Canadian colleges that grant associate's or bachelor's degrees. It provides such data as costs, locations, financial aid, athletics and special programs.

CompuServe subscribers can search Peterson's using a number of variables, such as college name, majors, location, sports, entrance difficulty, coed or single sex, size, public or private, housing, ethnic or geographic mix, enrollment patterns, admission requirements, application deadlines and costs.

Some researchers and avid readers use the Book Review Digest (GO BOOKREVIEW) to gather information, as it provides references to more than 26,000 fiction and non-fiction English-language books. It is updated twice weekly and extends back to April 1983. The database is searchable by subject, title, author and person named as subject. Reviews are drawn from more than 80 American, Canadian, and British periodicals covering general and social sciences, humanities and general reference.

#### Monitoring the News

Among CompuServe's ranks of pleased parents is Caryl Bigenho, of Simi Valley, Calif., whose son Chris graduated cum laude from the University of California at Santa Barbara in June 1987. He did it with the help of CompuServe's Executive News Ser-





**Wolf watching for senior thesis:** Caryl Bigenho and son Chris

vice, according to Bigenho.

"Chris majored in environmental studies and was required to complete a senior thesis to receive his degree," she

says. "He chose the biological and political implications of the reintroduction of the wolf to Yellowstone Park, a topic of much current debate.

"Most of the historical information was available in the university library, but for up-to-date information and names of people to contact for position statements, he relied on CompuServe's Executive News Service (GO ENS). I set up a file for him called 'WOLF,' monitoring the newswires of just those states where the wolf now is and those that would be affected by the reintroduction. Once a week, I would check the file.

"From time to time, when Chris would come home to do his laundry, as most college students do, he also would collect his current printouts on the wolf controversy, which he then screened for information to add to his study."

Foster parent Daniel J. Graham, of Milwaukee, says his family uses CompuServe in a different way than most families.

"We got CompuServe primarily for our foster child," Graham explains. "She has considerable problems with her self-image, interpersonal skills and communications. We hoped to use CompuServe to establish a common interest between her and ourselves. We discovered many other uses. Because of the ease of use, she is able to do many new things, boosting her self-esteem. Being able to talk to other people in a non-threatening environment is a tremendous help in the development of her interpersonal and communications skills.

Although she is a good student, the education forums have shown her new ways to increase her academic opportunities. "Through CompuServe, she has found new friends, learned new skills and expanded her horizons. CompuServe has been a great tool in helping her special problems."

Graham, whose CompuServe number is 76606,356, would like to hear from others who've used CompuServe similarly, and who might have ideas on furthering this therapeutic approach to CompuServe.

Merrill Frankel, seventh-grade social studies teacher at Berendo Junior High in the Los Angeles Unified School District, says the high point of the 1987-88 school year for him was when, through the Education Forum's message board, he met another California teacher who visited and helped him teach his five junior high school classes. Their topic that day was "The Class of the Future: 2040." Afterward, Frankel's 150 students sent electronic thank-you notes to the teacher who visited them.

That teacher is Kurt Harper, the

Paul Prossie



Education Forum's "Future Talk" section leader and resident futurist. "Thanks to the Education Forum and EasyPlex, 150 inner-city kids had a touch of the future," Frankel says.

Brian Jay, assistant administrator in the Science/Math Forum (GO SCIENCE), is a student helping students in a forum filled with professionals. "It is generally a forum of professionals who know what they want, and most of them have already done it," Jay says.

## Close Encounters with the Future

In the Space Education Forum (GO SPACEED), students and teachers are having close encounters with deep space and the future. Dick DeLoach, forum administrator, says CompuServe subscribers browsing through the forum's many special projects and conversational exchanges might run into one of the five "McAuliffe Educators"—five US teachers selected by the National Foundation for the Improvement of Education in the newly formed Christa McAuliffe Institute, named in honor of the teacher who perished in the explosion of the space shuttle Challenger. These five teachers are exploring ways to bring technology to the classroom, and all five use the Space Education Forum to stay in touch with one another and coordinate day-to-day plans, even though they're situated across the country.

In another project, students under the direction of Ron Fortunato, National Aeronautics and Space Administration Teacher in Space finalist from Virginia, are working on a student space shuttle experiment. "NASA's Langley Research Center has donated room aboard a future shuttle mission for what is called a 'Get Away Special' canister," DeLoach explains.

"The students have organized themselves into a team modeled as a NASA flight project team to design and conduct the shuttle flight experiment. Called the NORSTAR Team, these students each have responsibilities, such as project scientist, electrical systems head and management operations head. Each position has a NASA scientist or engineer to serve as a mentor in what the students refer to as the Shadow Team.

"The experiment they have selected is technically challenging. It involves the quantification of ultrasonic acoustic momentum transfer into various types of materials—an experiment that is difficult to perform in other than a micro-G environment. The scientific



**Mission to be accomplished:** Fortunato and student

community at large is very interested in the results, as they relate directly to applications of NDE [non-destructive evaluation] techniques used for such practical problems as detecting microscopic cracks in rocket motors."

The NORSTAR students use the forum to talk with aerospace professionals. For example, one student who developed the computer automation aspects of the experiment, which is designed to run unattended, was able to talk directly with a design engineer from a major computer chip manufacturer to answer questions about the suitability of a particular chip for his design.

Another student spaceflight project that coordinates its communications through the Space Education Forum is called the SEER Project (Space-station Environmental Expert-system Research). The SEER experiment is expected to share space on a shuttle payload pallet during a 1992 launch.

"Students are designing an artificial-intelligence expert system to conduct experiments remotely, for application in an unattended on-orbit environment," DeLoach says. "Former Space Station Chief Scientist David Black reviewed the SEER Project and, on his recommendation, the project is expanding to include SEER teams in other countries as well as the United States." Now US

and Canadian SEER teams are conferencing weekly in the forum, and teams are being formed in Japan, Australia and several of the European Space Agency countries.

Other Space Education projects include conducting large-scale "Mission to Mars" space flight simulations and developing applications for NASA's Advanced Communications Technology Satellite, which will be launched in the early 1990s.

Meanwhile, more down-to-earth people, like UCLA student Isaac Matarasso, are discovering not only a variety of forums and services but also like-minded CompuServe users.

"CompuServe puts countless resources within a student's reach," says Matarasso. "But the most important resource on CompuServe is other people who share your situation. The various forums, their libraries and conferencing are things that are either not widely available or aren't easily accessible. With CompuServe, I am more confident about gathering research items that are innovative and fresh. CompuServe makes being a student easier—and quite a bit more fun."

*Randy Rendfeld, a free-lance writer based in Anderson, Ind., is an education reporter for The Anderson Herald-Bulletin. His CompuServe User ID number is 76004,1470.*



## Ball State and AT&T Create Teleport Teaching

by Juli Metzger

Ball State University is a mid-sized university in Muncie, Ind., about 60 miles north of Indianapolis. Not many people know about Ball State, except that it is where David Letterman went to school. But campus leaders are trying to change that and they're doing it with technology.

Dr. Ray Steele has spearheaded a partnership with the American Telephone and Telegraph Co. to create at Ball State the Teaching Environment Model of the Campus of the Future (TEMCOF). The arrangement calls for technology developed by AT&T to be used throughout campus. Using fiber optics, the project, a three-pronged attack at the changing technological and teaching environments, includes a campus distribution system and switching apparatus capable of handling voice, data and video information.

Since 1984 when the state-funded university acquired tax dollars to initiate a computer-competency program, the number of computer workstations has more than doubled, from 965 to 2,000. TEMCOF will provide those terminals with access to a central database and the university's mainframe computer, and facilitate access to information services such as CompuServe.

The campus library has acquired popular bibliographic databases including ERIC (Educational Resource Information Catalog) and PSYCH, a service for professionals in psychology. The library's card catalog system also is automated using OPAC, the On-Line Public Access Catalog.

The Ball State project depends on an Information Systems Network, which provides high-speed data communications between various computers and terminals. The comprehensive data-networking capability of ISN allows the university to connect with various local area networks into a wide area network. The ISN can serve a single building or the entire campus and can grow to serve multiple locations, even off campus.

AT&T's STARLAN will enable the university to use software developed for MS-DOS and AT&T's Unix. The network also is compatible with AT&T's Information Systems Architecture, providing a high degree of connectivity with AT&T's voice and data services, as well as with equipment of

other vendors and manufacturers. STARLAN supports microcomputer connectivity for workstations, printers and other peripherals.

The project combines low-cost, twisted-pair distribution and a high-speed, fiber-optic backbone, eliminating the need for miles of expensive coaxial cabling.

The system is scheduled to be online by the fall of 1989. The data and voice switch became operable early this summer.

The attraction to ISN is its expanding capabilities. "In effect, the project puts Ball State in a position of being a teleport; not unlike an airport," says Steele, who created a similar project at the University of Pittsburgh in 1983, where he was assistant provost. "As a service center, we can help others get information."



Ruth Chin

Futuristic campus: Steele

AT&T is working with Burke Technologies in South Bend, Ind., to install a custom-designed video switch at Ball State. The basic switch, a Dynair, is used at NASA and the Jet Propulsion Lab in California. The video switch will integrate with the system, according to Steele, making it possible for university professors to retrieve slides, video recordings and tapes without using a film projector or VCR. Data and graphics also may be transmitted. Using a device much like a television remote and a Touch-Tone telephone key pad, a professor can access material from a central information center.

"We've been looking for different methods to improve the teaching/learning process because first and foremost we are a teaching institution," says John Worthen, president of Ball State. "We think telecommunications technology is going to change the way we do lots of things in our society, and we think it's going to change the way we teach, certainly the way we learn."

An \$8.2 million telecommunications building, scheduled to open in time for fall classes, will complement the state-of-the-art distribution system. It will house various departments, including the Center for Information and Communication Sciences, which administers Ball State's newest graduate program. The Center, directed by Steele, focuses on training individuals to work in a changing environment.

With the new distribution system in place, a PBX telephone system will tie together every office, classroom, special-purpose facility and dorm room in a network that allows functional, plug-in communication by voice, data or visual means. At its peak performance, the information network will provide communications necessary for automated class registration, advising and campus information. It also will deliver library materials, both page and image, to the user's location; permit personal computer users to access the same information; and provide the university with a means to reach other institutions with special electronic classroom models.

"We have a diverse student body," says Worthen. "We have to find ways to get to all kinds of students. Some students learn better in some modes than do others. The visual mode is going to help faculty members. They will be more coaches of learning than just disseminators of information."

While other schools—research universities such as University of Pittsburgh, Carnegie Mellon, Cornell and Maryland—have developed technology models, Ball State is different because it is primarily a teaching university.

In the community of 18,000 students and 1,100 faculty members in 60 academic departments and six colleges, TEMCOF is providing a living laboratory for students, an integrated communication system and easy access of information to everyone on campus.

AT&T is also provided with a "living laboratory"—a test site. The partnership requires that AT&T use its latest technology, even if that means modifications in the original plan. In turn, Ball State is the "showcase" for the technology.

Says Greg Allen, public relations manager for AT&T in Indianapolis. "We take our technology and apply it in actual application. This isn't a laboratory but a real, honest-to-God campus, something large and dynamic. This is where we prove ourselves."

Juli Metzger is a free-lance writer based in Muncie, Ind.



## Satellite Paves Way for Electronic Field Trips

by Randy Rendfeld

Students will take "electronic field trips" in the 1990s, if John Bluck's work pans out.

When the Advanced Communications Technology Satellite is launched by NASA in the early 1990s, Bluck plans to begin two years of testing what he calls Classroom Access to Diverse Worldwide Communications or, more simply, electronic field trips. Using the satellite's capabilities and other readily available technologies, Bluck plans to produce two initial seasons of "instant documentaries" for public television.

"Students will use communications gear and hook into the satellite to gather information about breaking stories in science and engineering," says Bluck, ACTS experiment's principal investigator at the National Aeronautics and Space Administration Lewis Research Center in Cleveland.

"For example, the supernova (SN1987A) would be a good project if the satellite were up now. The students could talk with experts using the best form of communications available to investigate the supernova.

"The satellite is digital as opposed to analog—the kind we have today. It will be capable of transmitting approximately a quarter of a billion bits per second up and down," says Bluck. "It will not have one big beam, like a floodlight hitting the whole country. Rather, it will have many beams that will hit various cities. This will allow us to use the same frequencies at the same time to send messages efficiently across the country. It will be what they call a 'switchboard in the sky,' because there will be a switcher onboard sorting all this digital information. And it will take streams and split them up and send the right information to the right cities."

A multimedia simulation of this concept was conducted on Oct. 22, 1987. The program, called "(SF)2, Science Fiction/Science Fact," was a joint effort between CompuServe, Michigan State University's public

television station, Bluck and others. The live talk show featured several science-fiction authors, including Arthur C. Clarke, who joined the broadcast from Sri Lanka.

During the broadcast, CompuServe subscribers used live conferencing facilities to transmit questions to the authors and panelists. The questions streamed across the bottom of the television screen "sort of like a weather warning," Bluck recalls. At the same time, artists uploaded drawings to the broadcast via slow-scan

Space, Space Education and Astronomy forums (GO SPACE), says CompuServe subscribers logged onto the SF2 project from the United States, Canada, Japan, Panama, Australia and West Germany. He sees CompuServe, with its conferencing and data-processing capabilities, continuing to be a key player in these activities. For example, CompuServe has developed voting software and polled subscribers online with SF2. Their answers were instantly tallied and presented to the studio guests.

Combining these kinds of search-and-sort capabilities with the new satellite's abilities to handle various television, radio, videotex and other communications media could create what Bluck refers to as a "magic carpet."

"I see this as a way of linking things that already exist," Bluck says, "things that have been developed for the consumer. Why not use what's there and try to hook it up in a new way?"

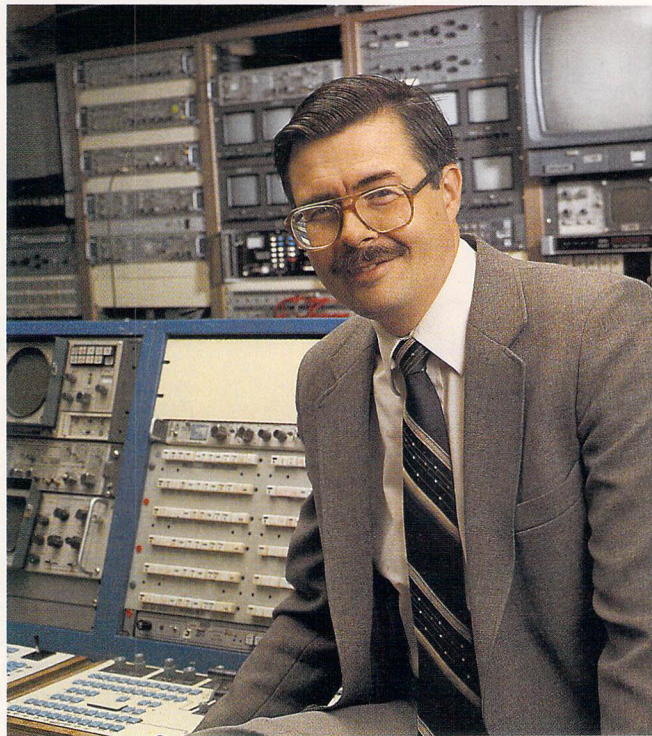
At NASA, Bluck has produced such TV shows as "NASA at Work," "Life in the Universe" and "Journey Through the Solar System." He also produced several instant documentaries during Voyager's flight past Uranus, which he says allowed viewers "more than a 30-second report from a network."

Another project Bluck hopes will bear fruit is that of the "instant textbook." Bluck says collaborating authors and experts may someday assem-

ble on CompuServe to upload chapters to books dealing with new developments in science, and these works will be edited and distributed in a matter of days instead of months or years.

"One of the big problems we have is getting accurate information to students and teachers. I'm sure if you go through textbooks, you'll find inaccuracies that were thought at the time to be correct, or a recent discovery that is not there. These are methods in which we can begin to get the instant textbook or instant documentary.

"There are a lot of things that could be done with the tools we have," Bluck says. "It's like taking the wheel, putting notches on it and making a gear rather than re-inventing the wheel."



Experiment Investigator: Bluck

television. An encoded essay was sent and received through another method capable of transmitting at approximately 82,000 baud.

"I wanted to try everything possible at once," Bluck says, "to try to see how well these things would mix." Bluck acknowledges the SF2 project uncovered some glitches. For example, panelists had trouble reading some of the CompuServe subscribers questions. So in the next simulation, which could be conducted this year, Bluck wants to route CompuServe users' questions to the panelists through a voice synthesizer. In addition, he hopes to further test the sorting-and-searching capabilities of computers.

Dick DeLoach, NASA researcher and administrator of CompuServe's

Studio 2479



# Apple Vendor and Monomaniac

## Guy Kawasaki Promotes 4th Dimension

by Joe Noethlich

Guy Kawasaki is more than just another vendor on CompuServe's Apple Vendor Forum (GO APPVEN). He is a man charged with pure zeal and vigorous purpose.

Kawasaki, past director of software product management for Apple Computer and a well-known proponent of the Macintosh, became, in April of 1987, president and cofounder of ACIUS, a US based affiliate of ACI, a European software-development company. He is dedicated to promoting ACIUS's first product, 4th Dimension, a powerful relational database for the Mac. To best support 4D, Kawasaki and others of the ACIUS team participate regularly in the Apple Vendor Forum. Messages and files relating to ACIUS appear in Section 2 and Library 2 of this forum.

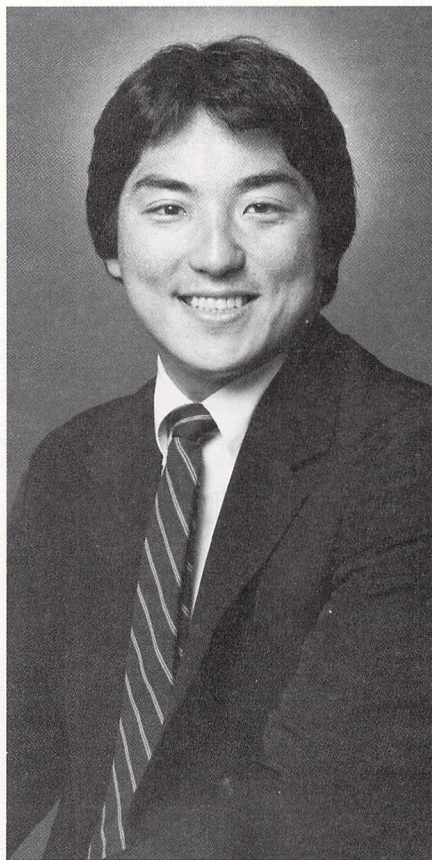
"The power elite of the Macintosh community 'live' on CompuServe," Kawasaki says. "They are the people everyone else goes to for advice. And, as they are the market leaders," he adds, "it is imperative for me to be in contact with them. Being online is a great way to keep track of the pulse of the marketplace."

"CompuServe is also an efficient way for us to stay in touch with our customers," Kawasaki says. "From the Apple Vendor Forum, we can disseminate information and sample files across the country almost immediately, seven days a week, 24 hours a day."

"It is far easier to look at someone's problem in writing than to hear it explained over the telephone," Kawasaki says. "And in providing personal attention, we become people to our customers, not just 'the developers'."

Kawasaki finds other advantages to participating in the Apple Vendor Forum, too. "We can leverage the knowledge of other 4D lovers to help us respond to questions quickly," he says. "Many times other owners of 4D answer questions for us. And, people buy 4D, in part, because they know we are on CompuServe, where they can get support, fun and camaraderie."

But Kawasaki doesn't go online just because it's good for business. "I happen to love electronic mail," he says, "so I log onto CompuServe about 10



4th Dimension drive: Kawasaki

times a day. I enjoy the banter that occurs online. It gives me the chance to interact with people I've never met before, and I love gossip and 'yenta-ing'."

In contrast to his current position, Guy Kawasaki has not always been the director of several departments or the president of a company. Upon joining Apple in September of 1983, he had one responsibility: software for the Mac.

"When I was hired," Kawasaki recalls, "I was told, 'Get great software.' But no one told me how, or what the rules were. Believe me, I broke many rules at Apple to get the job done."

To achieve results, Kawasaki ceaselessly scouted developers' efforts. "I spent most of my time cajoling, pumping up and beating up developers," he says. "I did whatever it took to get the kind of software we wanted."

"It wasn't hard to get developers

started," he says. "But it was hard to get them to finish, because writing Mac software was a new experience." Kawasaki succeeded, however, by using what he terms pure fervor and zeal. "I believed that we would change the world," he says. "The entire Mac division felt this way."

When Apple promoted Kawasaki to director of software product management, his responsibilities increased dramatically. For example, he then managed approximately 70 people within the departments of marketing, technical support for developers, developer services (Apple's certified developer program), and tools and languages.

By April 1987, however, Kawasaki felt that he had completed his mission for Apple. He wanted a new challenge: entrepreneurship. ACIUS provided his opportunity.

When approached to become president of ACIUS, Kawasaki rose to the challenge. However, he has kept ACIUS closely linked to Apple, because he believes in 4D, the Mac and Apple. So close is this relationship that ACIUS is headquartered in Cupertino, Calif., next to the buildings that house Apple.

"With 4D," Kawasaki says, "I am trying to broaden the image of the Mac from solely a graphics and desktop publishing machine to a serious productivity machine." He touts 4D as an exceptionally important addition to the personal productivity software available for the Mac.

But Kawasaki is far from alone in his opinion of 4D. *Le Livre Mondial des Inventions* (The Book of Worldwide Inventions), published in France, named Laurent Ribardiere, author of 4D, as one of its three honorees for 1987. This yearly award honors individuals who have created significant inventions or orchestrated major scientific breakthroughs. Ribardiere was the first software author to receive the award since its inception in 1983.

"Behind every great accomplishment is a monomaniac," Kawasaki says. However, Peter Drucker, noted business author and perhaps the originator of this notion, additionally characterizes such a persistent champion as "a monomaniac with a mission."

Guy Kawasaki is certainly a persistent champion. And he has embarked on a new mission: to lead ACIUS and promote its first software product, 4th Dimension.

Joe Noethlich is a free-lance writer based in Columbus, Ohio.



## Even in the South Pole, Crosstalk Communicates

by Paul Newkirk

In CompuServe's Crosstalk Forum (GO XTALK), forum users and a company-provided forum administrator help newcomers create successful applications of Crosstalk XVI and Crosstalk Mk. 4 telecommunications products.

"The forum is an extension of our technical support group and our applications group," says Forum Administrator Sheldon Hall, applications development manager at Crosstalk Communications, a division of Digital Communications Associates. "There is no hidden business purpose behind it, we just want to make it easier for people to use our products, particularly the more powerful ones where the situations are more complicated."

It is that support and the power of the software that has forum members singing praises of the forum and Crosstalk products. "Crosstalk XVI is a normal asynchronous dialup communications package with a script programming language," says Hall. "It is quite flexible. Mk. 4 is our flagship product. It is a multisection programmable communications program that facilitates connecting IBM-compatible computers to almost any other type of computer, including other micros, minicomputers and mainframes.

"Multisection means that it can communicate with more than one computer at the same time," says Hall. "Because Mk. 4 is extremely programmable, you can completely automate in one program any combination of calling, answering, making data calls, answering data calls and processing any resulting exchanged data."

Mk. 4 and the forum are being used by scientists and news deliverers. "The scientists doing research on the hole in the ozone layer at the South Pole are using it," says Hall.

"Plus, the company that does the satellite linkup for Turner Broadcasting uses Mk. 4 to make what is otherwise a single-user host into a multiuser dialup host," he says. "It has four Crosstalk Mk. 4 sessions running at once, three of them answering phones and one of them logged onto the minicomputer. The three sessions that answer incoming calls exchange messages internally with Mk. 4 to the session that is on the minicomputer. The minicomputer has one user, but Crosstalk is handling



Crosstalk Forum provides online support: Hall

security so that more than one person can dial in and use the otherwise single-user computer."

Ron White, the new editor for *The San Antonio Light*, used Mk. 4 and its scripting language to continuously update election results on Super Tuesday. "The county was tabulating the election results and posting them on their computer system. With one micro, two modems and two simultaneous sessions of Crosstalk, I was able to download the election results from the county computer and then upload them to our editorial computer. All of the uploading and downloading was continuous because the results were being updated continuously. I wrote two scripts, one for uploading and one for downloading, and was able to read a book on Super Tuesday while Crosstalk did the processing."

White's appreciation is not limited just to the product. "What really impressed me is that Sheldon Hall is one of the people that wrote the program I'm using. When I have a problem, he can usually come back with a suggestion. One day I left a message for Hall. I was reading the other messages and, before I left the forum, there was a reply. That is the best support I've gotten out of any software company. In addition, a lot of handy scripts are uploaded, new ways to use Crosstalk or solutions to problems."

While Hall says support will not always be as prompt as White's example, other forum users continue to praise the software and forum.

"I saw the product being consistently recommended by others on the IBM Communications Forum, so I went to the Crosstalk Forum," says Ed Girou, senior computer consultant with R.A. Kottmier and Associates. "I found a demo online and downloaded it. It was excellent. I asked Hall a few

technical questions and his astute responses gave me every confidence that this well-engineered product would meet my requirements. I bought Mk. 4 and immediately installed it for myself and my clients in place of the software we had been using. It's more than just a communications package. It is a compiler, an editor, a memory manager and a multitasker.

"I travel a lot," says Girou. "I wanted to be able to get a communications program and information all on one floppy. I was able to with Crosstalk."

Girou has used Crosstalk in innovative ways for his clients. In one instance he used Mk. 4 to replace a \$5,000 piece of equipment in a metal stamping company. In another instance, he used Mk. 4 for an ambulance company that wanted to install radios in the ambulances to send messages to hospitals. "Mk. 4, with scripts I had written, did more than just communications, it became a traffic manager between the company and the ambulances," says Girou.

As Girou became more involved in Crosstalk, he began to see more applications. "I frequently upload programs onto the forum for free downloading. It's a way of helping others, because I've gotten a lot of help online. Hall encourages us by allowing us into private areas to help behind-the-scenes script designing. We've used the forum as a technical think tank."

Forum users are often impressed when they find that Les Freed, president of Crosstalk, monitors the forum daily. "This shows that they consider the forum a vital part of their advertising, public relations and technical support," says Girou.

*Paul Newkirk is a free-lance writer based in Columbus, Ohio. His CompuServe User ID number is 70000,1036.*



## Yours by Design

by Michael Naver

An animated movie of a "Sausalito hippie bug" on a software company's CompuServe forum?

If you're an architect, draftsman or engineer, or if you just happen to be interested in computer-aided design, you'll find CompuServe's Autodesk Forum (GO AUTODESK) worth a visit.

One reason is the unusual way the forum administrators apply CompuServe's graphics software to support their visually oriented products. "It's a unique way for a software company to use the GIF graphics format to market products," says Kathy Gerber, CompuServe product manager.

Autodesk Inc., which operates the forum, is best known for AutoCAD, an industry-standard computer-drafting package that has sold more than 150,000 units worldwide. Autodesk supports AutoCAD on the forum, as well as its other products: AutoLISP, AutoShade, AutoSketch and a new product, AutoFLIX.

"Most of the people who visit the forum are architects, mechanical engineers and electrical engineers," says Jamie Clay, the company-provided forum administrator. "These are people who use computer-aided design for professional drafting purposes. We have thousands of members, some from Holland, Japan and Australia, since AutoCAD is an international product."

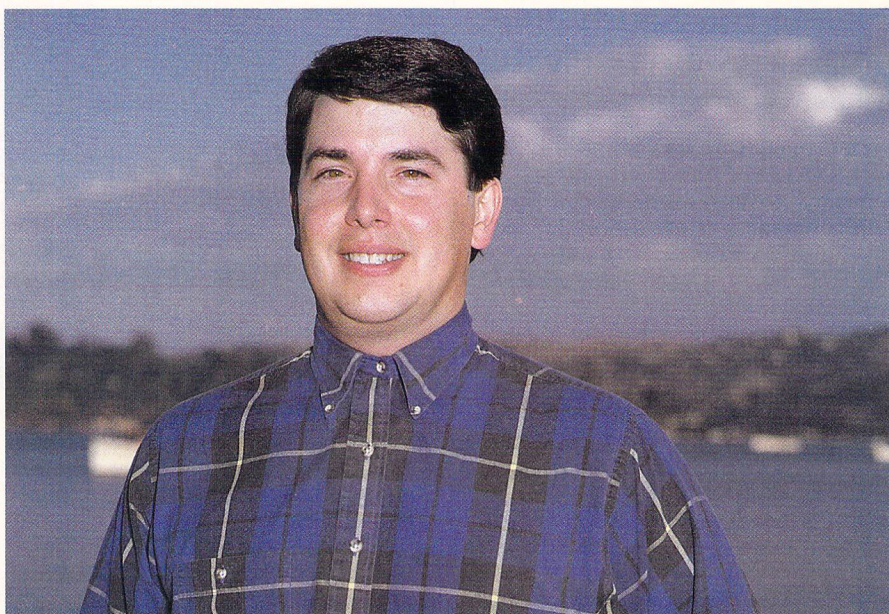
The forum is also used by third-party developers to customize AutoCAD for specialized drafting disciplines.

Autodesk uses the forum to let users preview or sample products through the use of CompuServe's GIF graphics software. This allows Autodesk to show sample screens, so users have an idea of what the product does before they buy it.

For example, when Release 9 of AutoCAD was ready, "it was a significant change from previous releases in the user interaction," Clay says. "Because people were not familiar with it, we had GIF files on CompuServe demonstrating the changes that were made."

Autodesk found this approach to be effective, particularly for dealers, who could download the GIF files and display them to customers. Similar demonstrations are planned for AutoCAD Release 10.

The newest entry in the forum is



Larry Lauterbron

GIF files help professionals with computer-aided design: Clay

Autodesk's only shareware product. Called AutoFLIX, it's a personal computer animation tool that animates output files from Autodesk's other products and turns them into movies usable for presentations or demos. (You'll need an EGA graphics card on your personal computer to display the movies. The software you'll need to download them is available in the forum.)

The forum's AutoFLIX library contains short, entertaining samples of AutoFLIX movies—like the Sausalito hippie bug. But the real thing can be as large as 12MB, and useful in computer-aided design.

"There's an interactive menu option to build your own menus," Clay says. "For instance, if the film shows the design of a house, you can choose to see only the bedroom or the garage."

As shareware, AutoFLIX costs \$35, but other Autodesk products range in price up to \$2,850 for AutoCAD Release 9. So the preview feature is important to prospective buyers.

Among the users of the forum are Autodesk dealers. "Many dealers are on CompuServe for the support we offer," Clay says. "The forum acts as a very focused technical newsletter that dealers probably find more valuable than any magazine. Also, the forum qualifies as the world's largest Autodesk user group."

As such, members create utilities for Autodesk products and exchange them on the forum. "We have a lot of members who will offer these great utilities

as shareware or at minimum cost," says Clay.

One such utility is Slide Manager, which can be used with all Autodesk products. Also, there's an artificial-intelligence language in AutoCAD called AutoLISP. "We have a large selection of AutoLISP routines people have contributed. It's one of the largest libraries on the forum," Clay said.

Each Autodesk product has its own library, where utilities and textfiles are stored. In addition to those already discussed, these products are AutoShade, a shading utility, and AutoSketch, a drawing tool.

Other features of the forum include a regular weekly conference in which officials of Autodesk talk with members and answer their questions. The message area is active, with most questions answered within 24 hours.

In monitoring the message board, Autodesk staff "looks for fires"—emergencies requiring immediate help. "This might happen about once a week," Clay says. "We do what we can to help customers. If it involves uploading special files for them, such as printer drivers, we do it through a private library called Special Delivery, where we'll give a particular user access to get his file."

So visit Autodesk Forum. It's "designed" to be seen.

*Michael Naver of Baltimore, Md., is editor of a newsletter advising corporate communicators and public-relations counselors on uses of new technology. His CompuServe User ID number is 70007,621.*



# Go Mall

A GUIDE TO COMPUSEVE'S ELECTRONIC MALL

SEPT./OCT. 1988

## **FLASH!**

Connect time slashed  
50% at The Mall in  
September

## **Super Sidewalk Sale:**

Software Discounters of  
America

## **Bloomingdale's:**

like no other store  
in The Mall

## **Sleeker speaker systems**

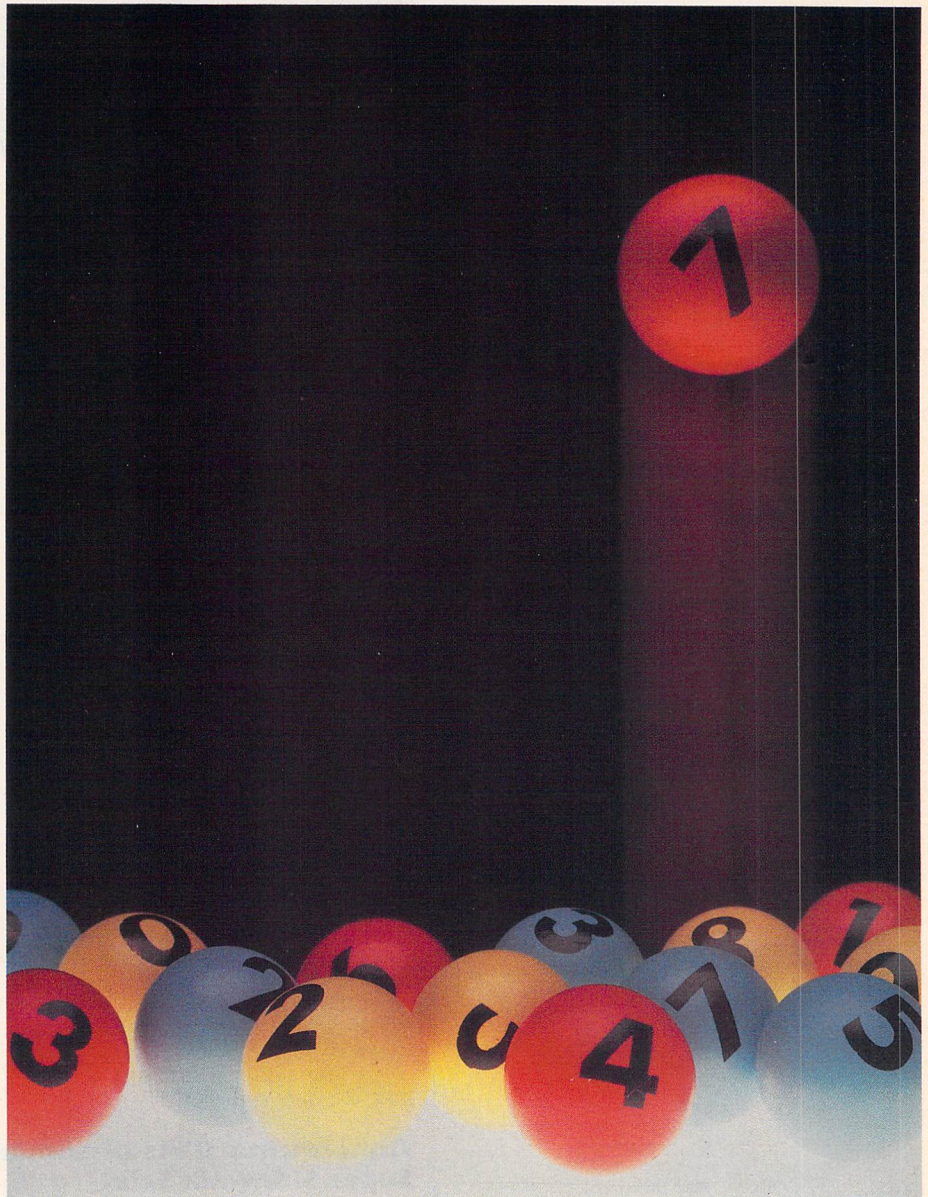
from Anka Electronics

## **Connect with AT&T:**

learn how data  
networking can boost  
your business

## **Music for a new age**

from Windham Hill



## **Your Number's Up!**

Win a week in paradise from ENDLESS VACATION  
TRAVEL, or a pocket-size personal computer from  
Paradise Technology

**THE  
ELECTRONIC  
MALL®**



Dear Shopper,

Very early one Monday morning last fall, I had the pleasure of calling CompuServe subscriber Phil Frye to tell him he'd won a trip for two to Paris, compliments of Mall merchant Air France. Frye was the grand-prize winner in Your Number's Up!, a contest that awards hundreds of prizes to lucky Mall shoppers.

This year, by popular demand, Your Number's Up! is back. If your CompuServe User ID number is up, you'll win one of more than 200 weekly prizes! And, if you're one of this year's two grand-prize winners, I could end up calling you ... congratulating you on winning a one-week stay at the luxury resort condominium of your choice, or a complete computer package.

This issue, we have several new merchants for you, beginning with Bloomingdale's. Shopping *this* Bloomingdale's is heaven—trust me!

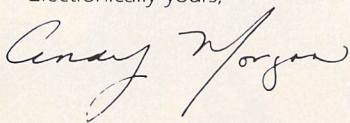
There's much more that's new, too. Book lovers can add to their reading stack at the new merchants Penguin Books By Mail and John Wiley & Sons or, at the all-new, vastly expanded Waldenbooks' store. Serious stock market players owe it to themselves to investigate Halvorson Research. And anyone with a green thumb should dig into Williams & Eeden Garden Center. That's just for starters!

Fall, to me, also means back to school ... Halloween ... and an avalanche of new catalogs. The Mall has you covered on all three. Check out the back-to-school specials. Take a look at the frights and sights in celebration of trick or treat. Browse The Mall's Catalog of Catalogs for a listing of all print materials that can be ordered online.

Fall also means (and I shudder at the thought) that Christmas is around the corner. Many merchants are offering free connect during September and October, letting you get a jump on holiday shopping.

So step inside this issue of *Go Mall*. Then, visit The Electronic Mall. May "your number be up," and may your shopping be as delightful as a crisp, cool autumn day.

Electronically yours,



Cindy Morgan

P.S. And, if you need yet another reason to visit The Mall this September, connect-time fees have been cut in half for the entire month. There's no better time to GO MALL!



### Pssst ... E.T. is coming.

E.T. is coming on video! Pre-order your copy from Magic Castle Video. But hurry. Supplies are limited and won't last. Quick! GO MV

### Halloween greetings from Pepperidge Farm.

Gads! Ghosts, goblins and gremlins galore! Ready for Halloween? Pepperidge Farm is if you are. For the kids, pick up the Halloween pail. Each decorative carry-all is filled with either two varieties of Pepperidge Farm's famous goldfish or a collection of cookies.

Other Halloween treats offered online include Pepperidge Farm's bucket of Halloween popcorn, The Haunted House and an inflatable ghost balloon.

For a Halloween scream, GO PF.

### Take a chance on TSR'S Trick-or-Treat Grab Bag.

TSR Games Shoppe just cleaned out its attic and found a bizarre collection of gimcracks they're just aching to unload. So ... in honor of Halloween, TSR has created The Trick or Treat Attic, featuring three grab bags of gaming goodies. If you're willing to take a chance, you could come up a real winner!

There are three grab bags in all: one for \$8, one for \$12 and one for \$15 ... values of \$30 or more!

Take a gamble and grab a grab bag. We dare you. GO TSR

### Announcing SDA's bi-annual Super Sidewalk Sale.

Twice a year, Software Discounters of America clears its shelves and moves a wide selection of software and accessories out onto its electronic sidewalk. Prices are slashed; the online stampede begins.

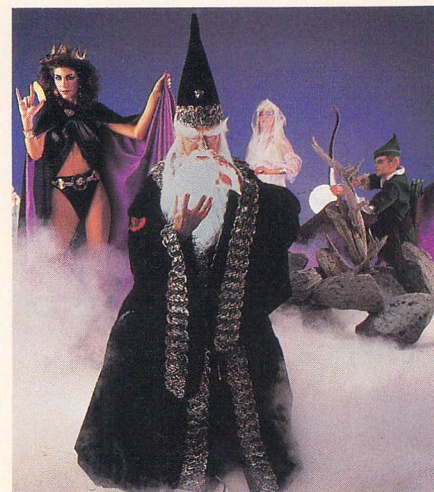
Computer owners can scoop up some real deals at this now-famous event. Mark your calendar. The next SDA sidewalk sale starts Sept. 1. GO SDA

### Free shopping in toyland at Hobby Center Toys.

Shop Hobby Center Toys for two free weekends in October. There will be no connect fees on Oct. 15 and 16, and again on Oct. 22 and 23. Mark your calendar now.

Why not get a head start on your holiday shopping? Find a wide selection of toys, games, dolls and hobby items ... everything from Steiff's Original Teddy Bear to planetariums and microscopes ... from model railroads to a model of the NASA Space Shuttle.

Take a tour of toyland. GO HC



### Ride your broom to Shoppers Advantage's<sup>SM</sup> online Halloween party.

Come to Shoppers Advantage's gala online Halloween party. Ghoulishly grand prizes await you. There's a recipe contest ... a ghost story contest ... even a best costume contest! Mark your calendar now. The party begins Oct. 7. GO SAC



**Go Mall, September/October 1988  
Volume 2 Number 5**

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### The Complete FAX.

CFAX 9600. A hardware/software system that operates on your personal computer in true background mode, so it's always ready to send and receive faxes—at 9600 baud—without interrupting other computer programs. Advance features include plain-paper printing, on-screen viewing and automatic re-dial. Compare to other systems priced at \$1,000 or more. Available exclusively at R+R Direct. GO RD

**\$474.05**



### Music blockbusters from Music Alley Online.

Jim Miller's *Personal Composer* MIDI software. GO MAO

List price: \$495

**\$347**

### Passport's Master Tracks Pro:

for the Mac and Atari ST

List price: \$349

**\$245**

### for the IBM

List price: \$395 **NOW \$277**

### for the Apple IIe and Commodore 128.

From Music Alley Online. GO MAO

List price: \$299 **NOW \$210**

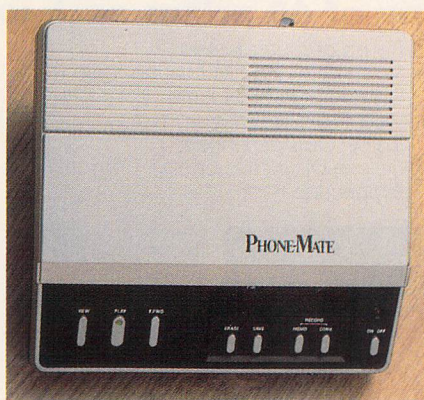


### This grill will thrill.

Generous-sized grill with deluxe features. Model #GG8865. From Char-Broil Grill Outlet. GO CO

List price: \$199.95

**\$179.95**



### Phone-Mate 9500 answering machine.

Phone-Mate dual cassette answering machine with beeperless remote. Time/day stamp, digital clock and variable greeting. From Shoppers Advantage. GO SAC

List price: \$189

**\$119**



### Freedom Phone FF1700.

Cordless desk phone with 46/49 frequencies and digital security, in addition to 1000-ft. range from base, switchable tone/pulse dialing, speakerphone and nine-number audiodialer. From Shoppers Advantage. GO SAC

List price: \$179

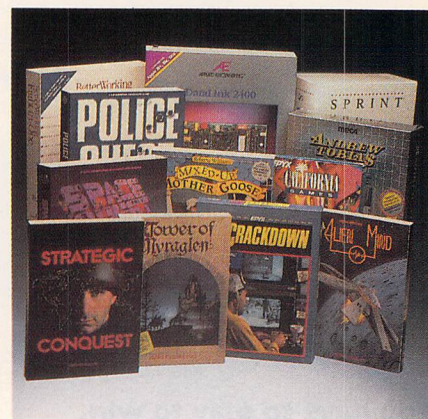
**\$119**

### "Why I like The Mall."

Announcing The Mall's Back-To-School Essay Contest! Put on your thinking cap and tell us in an EasyPlex essay of 100 words or less why you like The Electronic Mall. You could win *Webster's New World Dictionary (Second College Edition)* or an Electronic Mall highlighter.

Our judges will review all entries and select 20 winning essays. They will be posted online, and each winning writer will be awarded a dictionary. Another 100 essayists will win Electronic Mall highlighters.

For rules and regulations, and to submit your official entry online, see "Fun & Games" in *Go Mall Online*. GO GMO



During the month of September, Computer Express invites shoppers to "Go For the Gold!" at its Mall store. Participation is easy. Simply guess how many gold, silver, and bronze medals the United States will win in the Summer Olympics. The first three lucky subscribers who correctly guess the number of medals that have been won will win online shopping sprees at Computer Express.

- Gold medal winner: \$250 spree
- Silver medal winner: \$100 spree
- Bronze medal winner: \$75 spree

No purchase necessary. GO CE

### Where's Uncle Harold's will?

Good old Uncle Harold kicked the bucket. Rumor has it he was loaded. Problem is, his will is missing.

Seems he tore it up and hid the pieces throughout a certain Games Shoppe at The Mall. He always was a joker, that Harold. The Games Shoppe in question is TSR, of course, and it has posted a finder's fee. Anyone who can piece together Uncle Harold's will can get in on a piece of the action.

The first 10 subscribers to piece together the mystery will receive a prize pack valued at \$20.

Want to know more? Talk to Uncle Harold's lawyer. You'll find him somewhere at TSR Games Shoppe, and he'll be glad to give you a few clues on how to piece together the puzzle. GO TSR



Just when you thought it was safe to log on...

# Your Number's Up!

Tired of never knowing the "phrase that pays" on your favorite radio station? Fear not. Here's your chance to win one of more than 40 weekly prizes and to qualify for a grand-prize drawing: a week's stay in paradise or a portable personal computer.

Entering is easy. No purchase is necessary. Simply visit The Electronic Mall, answer one online question, and complete the official electronic entry form. Get

the question right and you'll automatically be entered in that week's drawing. We'll select 40 winning User ID numbers from all correct entries each week and post them on the following Mondays at approximately 6 p.m. If your number's up, you're eligible to go to The Electronic Prize Showcase and select the prize of your choice. Only one entry is permitted each week ... but you can enter every week for six weeks!

## On your mark, get set, GO YNU.

The contest begins Sept. 1. The first 35 winners will be announced online on Monday, Sept. 12. New winning numbers will be picked and posted on these dates:

- Monday, Sept. 19
- Monday, Sept. 26
- Monday, Oct. 3
- Monday, Oct. 10
- Monday, Oct. 17

Two lucky grand-prize winners will be announced online on Monday, Oct. 24. These grand-prize winners will be picked from *all* entries, so even if you're not a weekly winner, you can still win in a big way! Complete rules and regulations—and the official electronic entry form—can be found online. GO YNU

## Win one of 40 prizes each week!



Lotus 1-2-3 I and II



Windham Hill Records Sampler '88

### You have to play to win.

Here's a sneak peek at some of the prizes you can select if Your Number's Up! You can browse the complete list of more than 200 prizes anytime. All prizes will be awarded on a first-come basis; all weekly winners make their prize selections online.

If a prize has already been selected, you'll be asked to select another:

- Three days/two nights at The Shelborne Beach Hotel in the Art Deco district of Miami Beach from Bargain Holidays
- A blue topaz and sterling silver arctic ice necklace from Ivory Cache
- One pound of Jamaican Blue Mountain coffee from Coffee Emporium
- *Gone With the Wind* video from Magic Castle Video
- Lotus-compatible Pocket Spreadsheet from Paradise Technology
- *Bird: The Making of an American Sports Legend* by Lee Daniel Levine from McGraw-Hill Bookstore
- Perfect Data disk head cleaning kit

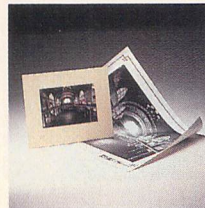


Bonsai tree



Georgia O'Keeffe prints

- from Computer Express
- Swimmate AM-FM floating radio from Rin Robyn Pool 'N Patio
- Valentino silk teddy from Inside\*Outside Lingerie
- Deluxe Distinctive Cookie Tin from Pepperidge Farm

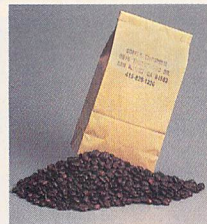


Ellis Island posters

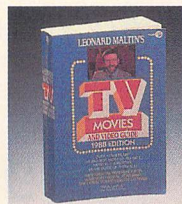


Cross pen set

- Two Georgia O'Keeffe portfolios of prints from The Metropolitan Museum of Art
- Dot's Famous Chocolate "Chip" Cookies from Some Things Special
- A 1/2-bushel deluxe assortment of navel oranges from Florida Fruit Shippers
- *Strip Poker 2* (digitized) by Artworx for the Apple IIGS, Atari ST, Amiga and IBM personal computers from Software Discounters of America
- *Windham Hill Sampler '88* compact disc from Windham Hill
- 100 perennial tulip bulbs from Williams & Eeden Garden Center



Coffee beans



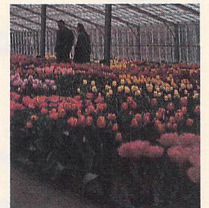
TV Movies

- An authentic Japanese bonsai from Williams & Eeden Garden Center
- *California Raisins* by Box Office for the C64, Apple and IBM personal computers from Software Discounters of America

- Three separate prizes: Steve Winwood's *Roll With It*, Van Halen's *OU812*, or Bruce Hornsby and The Range's *Scenes from the Southside*—all on compact disc from Express Music
- Cross pen set from The Stationery Center
- AT&T 800 directory from AT&T
- Rotisserie accessory kit from Char-Broil Outlet
- *Lotus 1-2-3 I and II* videotapes from Some Things Special
- Ellis Island poster series, signed by the artist, from Some Things Special



Chocolate "chip" cookies

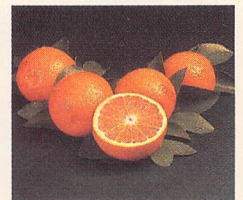


Tulip bulbs

- *Leonard Martin's TV Movies and Video Guide* from Penguin Books By Mail
- Cat bookends from Waldenbooks
- A dozen silk roses, boxed, from Walter Knoll Florist
- Four peach baskets filled with silk flowers from Walter Knoll Florist



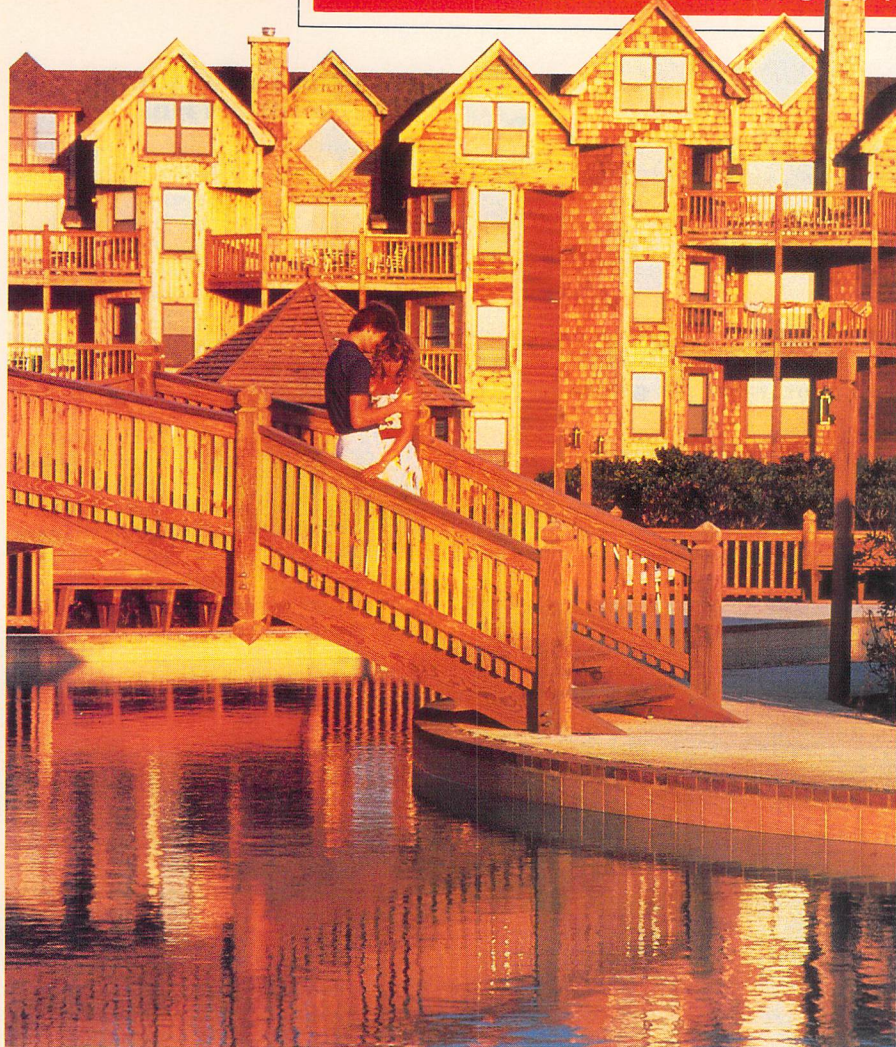
Light tripod



Florida fruit

- Black forest cheesecake from Desserts Direct
- *Leisure Suit Larry in The Land of the Lounge Lizards* from Software Discounters of America
- Light tripod from PanSon Electronics
- Case of 10 T120 videotapes from PanSon Electronics





## Win a week in paradise or a pocket-size personal computer.

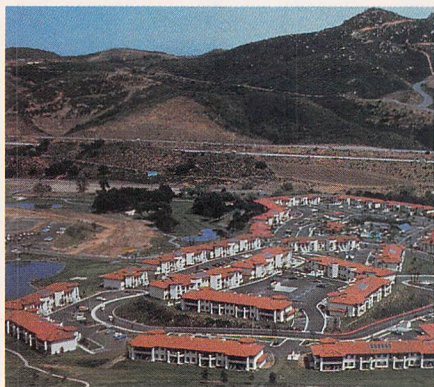
Two lucky winners will be selected at random from all weekly entries. Each will win one of two grand prizes: either a week's stay at a luxury condominium at the resort of their choice, compliments of Mall merchant ENDLESS VACATION TRAVEL, or a complete hand-held computer package, courtesy of Paradise Technology.

### From fantasy islands to magic mountains.

There are as many versions of paradise as there are vacationers. Maybe for you, it's a stretch of days on a stretch of sand on a tropical island. Somewhere where you have nothing to do except sip pina colodas under the shade of a palm, crack the spine of a good book and watch the sun go down.

Perhaps you're the adventurous sort. Snorkeling a coral reef in crystal waters ... hang gliding in an endless expanse of blue off of the Outer Banks ... kayaking on the white waters of the Rockies.

Or maybe indoor activities are more your style. Sampling cajun cooking and the sounds of jazz on a midnight club



crawl in New Orleans ... listening to the jingle, jangle of lady luck whistling to you at the tables in Las Vegas, the Bahamas, or Atlantic City ... dining on cuisine at the best of restaurants in New England, the Northwest or the Southwest.

Whatever your version of paradise, this year you can realize it, compliments of ENDLESS VACATION TRAVEL, if you're the grand-prize winner of Your Number's Up! who first chooses this option.

You'll be awarded a week's stay, subject to availability, at the resort condominium of your choice. (Sorry, airfare not included.) Select a luxury resort in Hawaii

... Mexico ... the Caribbean ... or the continental US. You'll choose from resorts in locales like Hilton Head, Honolulu and Barbados. You'll stay in a deluxe condominium that has extra touches, possibly a whirlpool, microwave or extra bedroom. The choice is yours.

So dream a little. Where would you go if you were the grand-prize winner who chooses a week in paradise? Browse ENDLESS VACATION TRAVEL's offerings. Request a free brochure or order a VHS Vacation Video. Each video is \$9.99 and comes with a \$50 coupon applicable toward your next resort condominium vacation.

Let the fantasy begin! GO EV

### From Paradise Technology: the most portable personal computer imaginable.

A second grand-prize winner will claim a complete hand-held computer package. Weighing only 8.8 ozs. and measuring 3 inches wide, this little powerhouse includes:

- a PSION Organiser II/XP hand-held computer
- two 32K datapacks
- a 128K datapack
- a Match routines program pack
- a concise Oxford spelling checker
- a typing tutor
- a word processor
- a pocket spreadsheet (Lotus-compatible)
- a Comms-Link serial interface
- an AC power adaptor
- Developer's software
- Introduction to the Organiser guidebook
- a black leather carrying case

With a total value of more than \$1,000, this most portable of personal computers will go anywhere with you. It's a perfect travel partner, and it's all yours, compliments of Paradise Technology (GO PT), if you're a lucky grand-prize winner of Your Number's Up!



PSION personal computer system



## Bloomingdale's: like no other store in The Mall.

**N**ow, no matter where you live, there's a Bloomingdale's at your beck and call ... at The Mall. The newest Bloomie's is open 24 hours a day, 365 days a year, too. Discover the amazing selection of merchandise displayed online, much of it available exclusively at Bloomingdale's.

Everything from clocks for keeping time to hammocks for wasting time ... from Waterford crystal to a waterproof Wet Cassette IV ... from luggage and electronic address books for on-the-road travel to housewares and appliances for the comfort of home.

### Unique wares for the house.

Take a leisurely stroll through Bloomingdale's Mall store, beginning in Housewares, perhaps. Here you'll select from serveware, bakeware, cookware, cutlery, clocks, electronics and more.

For those who imbibe, there's Cruvinet's wine preservation system. For teetotalers, Michael Grave's ultrasleek teakettle. A Takka pasta maker ... Krups miniature espresso machine ... the Fast-Track tie rack ... you'll find something compatible to everyone's tastes.

### Where value is crystal clear.

From Housewares, why not head for Tabletop and Gifts? Flatware, china, silver, crystal and gifts for men, women and the younger set all await you. Especially recommended is Bloomingdale's selection of Christmas ornaments from Waterford, Baccarat, Lalique, Lenox and Orrefors. Each is available in a new 1988 edition, as well as in editions from previous years.

For gift-giving, consider the Waterford christening cup or Royal Doulton's "Bunnykins" bone china 2-piece nursery set for baby ... select a Sasaki sports paperweight or a Baccarat charging bull for him ... surprise her with Wallace Sterling vanity accessories or a Christian Dior fine china malachite picture frame.

Dozens of gifts of distinction, from a Towle champagne cooler to an Erte service plate, are literally at your fingertips.

### Bags you'll look forward to packing.

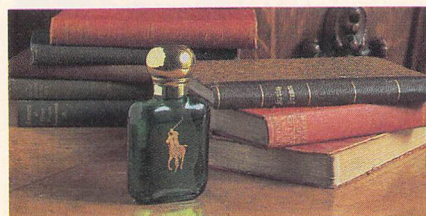
Next, visit the luggage department. For kids and teens, consider Bloomie's backpack, available in either nylon or leather. Select Le Sportsac collection ... Ralph Lauren's Polo "Bush" collection ... Pierre Cardin's 5-piece tweed set ... whatever your travel itinerary, Bloomie's has a bag for you.



7 Scents, a collection of fragrances

### Posh pens, futuristic games.

In Stationery and Games you'll discover photo albums, Cross, Fendi, and Parker pens; games, including a deluxe backgammon set and electronic chess; plus an abundance of out-of-the-ordinary offerings, such as Condo Golf, TV Hound and The Armchair Quarterback.



Polo for men



Two-tiered gift basket

### International personal care products.

Lastly, browse Bloomie's cosmetics aisle. It's lined with the finest of products for men and women. Fragrances ... treatments and cosmetics ... accessories and beauty aids, including a wide selection of Lancome, Paris products.

Also featured are makeup products from Kelemata and Galenic ... fragrances including Joy, Obsession, and Passion.

Discover Bloomingdale's most progressive store ... it's like no other store in The Mall. GO BL

*Bloomingdale's grand-opening,  
free-connect weekend: Sept. 3 and 4.*

## Music for a new age. From Windham Hill.

**N**ew age music and Windham Hill. The two are virtually synonymous. With its roots in jazz, folk and classical, this eclectic sound is instantly recognizable. Devotees of the genre will delight in Windham Hill's new Mall store.

Windham Hill, founded a mere dozen years ago, offers a full spectrum of sound online, including LPs, cassettes and CDs. Also showcased are videos, T-shirts, posters and other Windham Hill paraphernalia.

Profiles and appearance schedules of Windham Hill artists currently on tour are also provided. There's a customer service desk, too. Stop by with your questions on a new release or artist, or just to chat. You'll find the Windham Hill folk friendly and always ready to listen.

Whether already a Windham Hill fan, or merely curious, you'll want to request a free copy of *The Windham Hill Occasional*, a catalog featuring both new releases and old favorites.

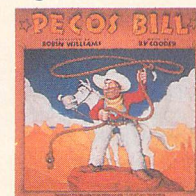
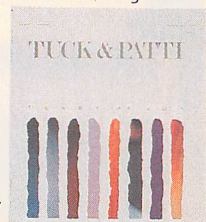
Among the new releases included in the 1988 summer edition were:

- Tuck and Patti's *Tears of Joy*
- Robin Williams and Ry Cooder's *Pecos Bill*
- *Modern Mandolin Quartet*, featuring string quartet pieces by Bach, Bartok, Debussy

Also featured is a series of recordings for children, including Meryl Streep and George Winston reading *The Velveteen Rabbit*, Jack Nicholson and Bobby McFerrin's *How the Rhinoceros Got His Skin/How the Camel Got His Hump* and Cher and Patrick Ball performing *The Ugly Duckling*.

From the "rockappella" of The Nylons to the piano playing of Philip Aaberg ... from George Winston to Jane Siberry ... from Kitaro to Kotke ... new New Age and older are online at Windham Hill's new Mall store. GO WH

*Windham Hill's grand-opening,  
free-connect weekend: Sept. 3 and 4.*



# bloomingdale's



## A gardener's paradise: Williams & Eeden Garden Center.

Meet David Williams, a horticulturist from New Jersey, and Sjoerd van Eeden, a flower bulb and plant specialist from Holland. Together, they welcome you to their new Mall store, Williams & Eeden Garden Center.

Step inside and you'll discover a gardener's paradise. Flowering house plants. Perennials. Garden tools. Imported Dutch bulbs. Books and gifts. Everything from catnip planting kits to authentic Japanese bonsais!



David Williams and Sjoerd van Eeden

### Nothing poisonous in this garden.

Begin at The Gardens of Eeden. A wide selection of bulbs is showcased here, including basics, such as daffodils, tulips, bluebells and lilies, as well as exotic classic combination packages, such as *Narcissus Recurvus* and bluebells or tulipa *havmanniana* and *chionodoxa lucilliae*.

For indoor gardening, head to The Greenhouse. Featured items include the carnivorous Venus flytrap and ready-to-bloom orchids in bud. From large flowered azaleas to dwarf flowering hibiscus, there's something for everyone.

Also offered online is a selection of decorative accessories and gifts for Hearth and Home. Select a simmering potpourri steamer, a dried floral basket or a Delft blue vase.

Visit The Tool Shed for everything you'll need to make your garden grow. Top quality stainless steel spades. Garden forks. Leather gloves. Swiss pruning shears. Rakes.

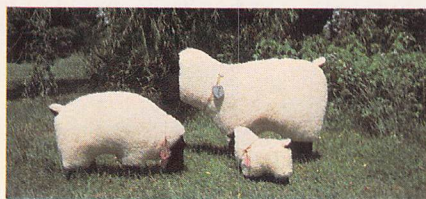
At The Terrace you'll discover the perfect touch to add to any indoor/outdoor living area. Terra-cotta herb gardens for the kitchen windowsill. Wind chimes for the patio. Teak benches and brass sundials for the backyard. Finally, be sure to see Williams & Eeden's Book Shelf and Gift Shop.

### Free catalogs, free bulbs and free connect.

To complement their online shop, Williams & Eeden's offers a free, beautifully illustrated brochure with professional botanical inkings bursting with flowers



Stainless steel garden tools



Outdoor sheep

and bulbs. And, to celebrate the launch of their new store location and the fall planting season, shopping will be free on Sept. 26 and 27. Explore the store at your leisure. Take time to smell the flowers! As an added welcome, Williams & Eeden will include a free package of colorful



### Pick winning stocks with help from Halvorson Research.

Where were you last Oct. 19? Anxiously watching your dollar value slip away? Now, nearly a year later, maybe you're ready to resume long-term investing. Whether you're a novice investor or an old pro who's seen the bulls and bears come and go, you'll want to pay a visit to Halvorson Research before you plunk down a piece of your paycheck.

Halvorson Research Associates (HRA) publishes a monthly listing of stocks to buy and sell. HRA also produces



Wooden duck planter



Teak bench

crocus bulbs with every order of \$25 or more during the month of September.

Whether you were born with a green thumb or are digging your fingers into the dirt for the very first time, you'll find Williams & Eeden's Garden Center to be a horticulturist's heaven. To discover this garden of delights, GO WE.

*Williams & Eeden's Garden Center's grand-opening, free-connect weekend: Sept. 26 and 27.*

a floppy disk for IBM-compatible computers called the HRA Sell/Buy EDUCATOR, that includes a summary of the HRA selected factors that will help you choose stocks with confidence.

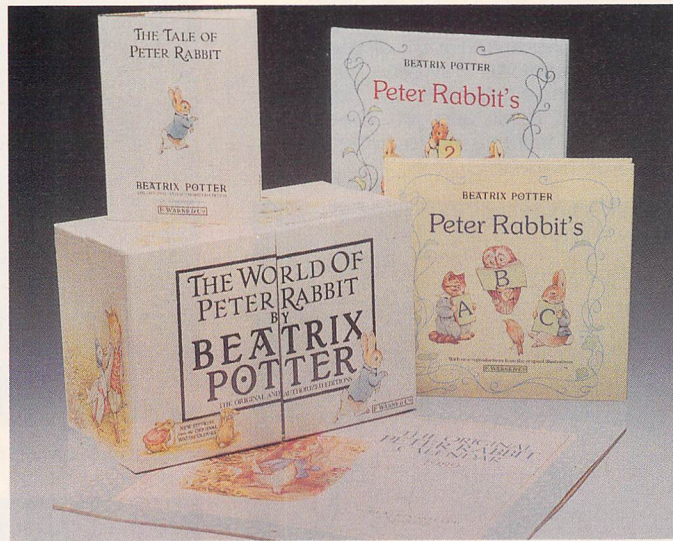
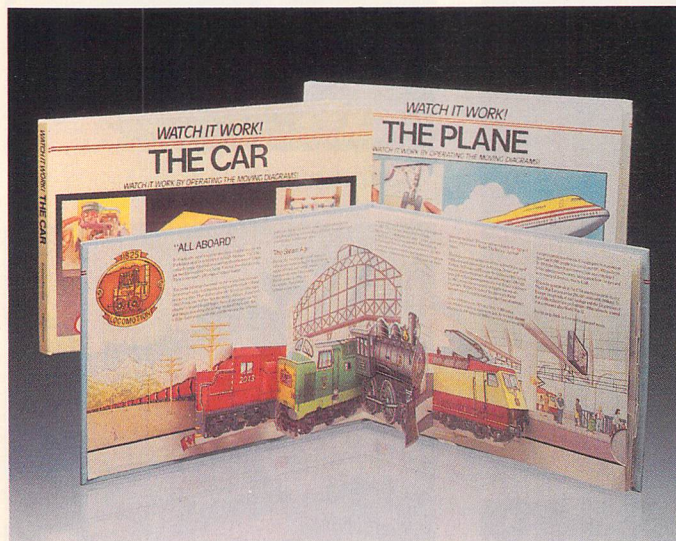
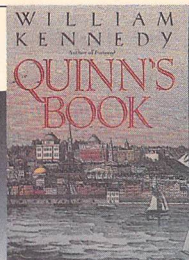
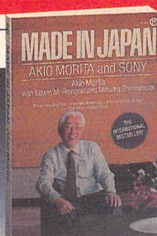
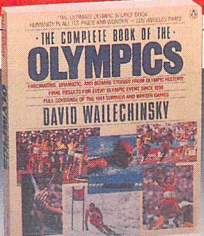
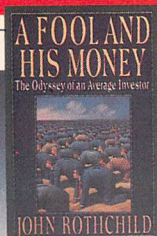
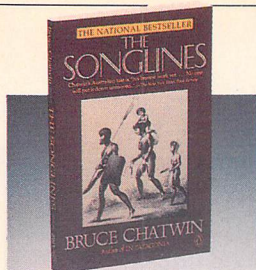
While past results may not be an indication of future performance, over the past six years HRA's recommendations on its *HRA Buy Class Stocks* disk would have enjoyed an average gain of more than 30%, ignoring expenses and dividends, while the S&P Industrials averaged less than 20%.

Pay a visit to HRA online and take a look at a sample HRA monthly listing and a sample HRA listing of favorite 30 stocks. A research tool that gives you all the information you really need to make savvy investment decisions, the HRA Sell/Buy EDUCATOR can be ordered directly online. GO HRA

*Halvorson's grand-opening, free-connect weekend: Sept. 10 and 11.*



## GRAND OPENINGS



Watch it Work

The World of Peter Rabbit

### Penguin Books By Mail entices literati with free books, free catalogs.

What's hot off the presses at Penguin Books? Find out today, online. A new Mall merchant and the publisher of over 200 new titles a month—with over 15,000 titles in print in all—Penguin Books By Mail now offers you the opportunity to shop online for the latest releases and the best of the backlist.

#### A surprise with every \$30 shipment.

To welcome CompuServe subscribers, Penguin has an exclusive online welcome offer. Any subscriber who places an online order of \$30 or more gets a free

book. This surprise gift, selected from a wide range of hardcover and paperback books (valued at up to \$25), will automatically be included with every qualifying order. Place as many orders over \$30 as you'd like, and you'll find a free book with every order.

#### Bestsellers by modem.

At Penguin's Mall store, shoppers will discover showcased online the best of the new releases. Books such as *Quinn's Book*, the newest novel by Pulitzer Prize winner William Kennedy ... *The Songlines*, Bruce Chatwin's mythical, lyrical tale of the Aboriginal ancestors of Australia, now available in paperback ... *The Complete Book of the Olympics* by David Wallechinsky ... *Made in Japan*, by Akio Morita, the chairman of Sony Corp., and

Ed Reingold, *Time's* Tokyo bureau chief.

Also featured online are the best of: bestsellers ... business books ... suspense and adventure books ... gift books and limited editions.

#### New titles and free catalogs every month.

Monthly, Penguin Books By Mail will showcase an all-new selection of titles online.

You can also request a free copy of Penguin's print catalog. Order it at The Mall and browse at your leisure at home.

To visit Penguin Books By Mail, GO PB.

Penguin Books By Mail's grand-opening, free-connect weekend: Sept. 17 and 18.

### Sleeker speaker systems from Anka Electronics.

Established in 1979, Anka Electronics manufactures high quality speaker crossover networks for home, auto and professional speaker systems. CompuServe subscribers are invited to browse its online audiophile and professional series offered at special discount prices. All products are fully tested before shipment.

Select from standard sub-woofers and 2, 3 and 4-way models, for example. Specifications, including crossover frequency, impedance, slope, capacitors, pc board size and net weight of each model,

are fully outlined online.

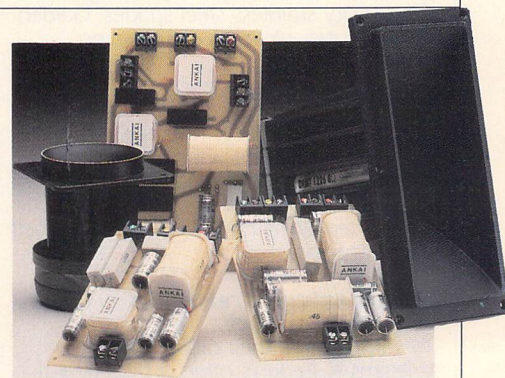
Also showcased are loudspeakers by IsoPhone, Dynaudio and Seas. IsoPhone, for example, offers six models, many well under \$100.

Subscribers are invited to request a free copy of Anka's print catalog, to browse the online specials and to consult the monthly online tips on product upkeep. If you have questions about any product, or are unsure of what will best fit your needs, simply contact Anka through "Talk To Us."

Anka will gladly advise you.

GO AE.

Anka Electronics' grand-opening, free-connect weekend: Sept. 10 and 11.



Speaker crossover networks, DKT 110 speaker, DKMT 1226 speaker



## Magazines that traverse the globe. From American Magazine Subscriptions.

Whatever your passion, you're sure to find a publication written especially for you at American Magazine Subscriptions. This new Mall merchant puts a wide range of trade and consumer publications from America and Europe at your fingertips.

You'll discover leading trade publications, such as *Advertising Age*, *Chemical Weekly*, *Data Communications*.

### Specialty periodicals on computing, business, fashion.

Also featured are more than a dozen specialty computer magazines. You can also subscribe to all the standard business

publications, including *Forbes*, *Fortune* and *Business Week*.

A full selection of consumer magazines is also offered: *Architectural Digest*, *The New Yorker*, *Gentleman's Quarterly*, *Scientific American*, *Travel and Leisure*, *Playboy*, *Popular Mechanics* and many, many more.

Dedicated followers of fashion can order subscriptions to foreign editions of *Vogue* and *Elle*, as well as Europe's best, including *Mondo Umo*, *La Mode* and *Taxi*.

### Subscription specials, personal service.

If you're looking for a magazine not listed online, simply contact American Magazine Subscriptions through the Special Order Option. You'll receive a quote on a

subscription rate for virtually any magazine or journal published worldwide.

### Incentives for students, businesses and gift-buyers.

For many of the magazines offered, American Magazine Subscriptions also offers order incentives, including specially-reduced rates for students and business-related subscriptions and added reductions for gift subscriptions of the same magazine. Best of all, once you're a customer, you'll enjoy many personal services, such as online renewal and change-of-address services for any or all of your magazine subscriptions.

What an offering! GO AS.

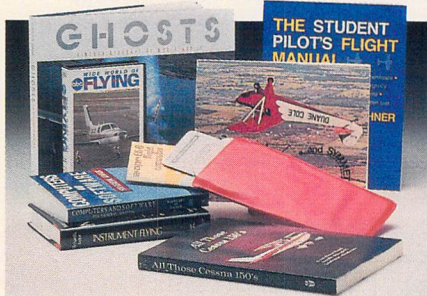
American Magazine Subscriptions' grand-opening, free-connect weekend: Sept. 10 and 11.



## Find even the most specialized pilot needs at Aero Academy of California.

Picture yourself winging into a pilot supply store where blue skies and smooth flying are guaranteed 365 days a year. Fifteen years of experience in pilot supplies enables Aero Academy to offer you the best aeronautic tools, all backed by fast, unparalleled, personalized service.

Pilots from student to ATP will appreciate the wide range of supplies and services available at Aero Academy. Aero-



nautical charts ... headsets ... flight simulators and flight-planning software ... aviation videos ... learn-to-fly, historical, photo

and entertainment books ... flight bags ... intercoms ... hard-to-get items ... and much more.

### They'll order what they don't have.

Aircraft parts and supplies, ground school instruction, flight lessons and airplane rentals are also available. Additionally, Aero Academy will special order hard-to-locate items for you. To top it off, your complete satisfaction is always guaranteed.

If there's a pilot in your life, ask about Aero Academy's personalized gift service. File your next pilot-supply flight plan at Aero Academy of California. Shop online or request a free catalog. GO AC

Aero Academy of California's grand-opening, free-connect weekend: Sept. 24 and 25.

## Get booked for business with John Wiley & Sons.

If knowledge is the precursor to success (or at least one), prepare for your rise to the top in this just-opened corner of The Mall—dedicated to a broad spectrum of published works.

*Behind the Couch: Revelations of a Psychoanalyst...* *The Naturalist's Year: 24 Outdoor Explorations...* *Programming with Macintosh Turbo Pascal*. These are just a few of the new books featured at John Wiley & Sons, a leading publisher of business and computer books now open at The Mall.

Business and management. Consulting. Languages. Travel. Real estate. Computers. Titles covering all of these categories and more are featured online. For those in the market for a new job, there's *The Complete Q & A Job Interview Book*; *CareerMap: Charting Your Own Future*; and *Job Search: The Total System*.

### For corporate players and entrepreneurs.

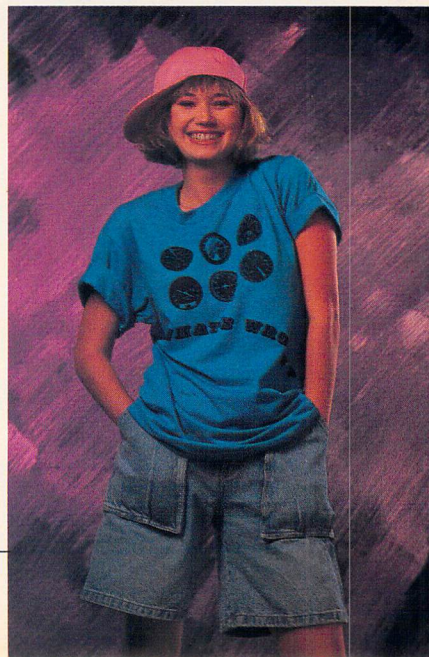
Interested in what makes a company work? Select *Inside America's Fastest Growing Companies*. Have an idea for your own business? Pick up *Starting on a Shoestring*, *The Small Business Bible* or *How To Start, Run and Stay In Business*.

Travelers will appreciate Wiley's travel books, including *Do's and Taboo's Around The World*, *Passport to Europe's Small Hotels and Inns* and *Europe Off the Wall*.

Also highly recommended are Wiley's language books. Finally, a complete line of the latest computer books is spotlighted.

Thumb through Wiley's online shelves. Request free copies of its catalogs, including the *EXCEL Business Catalog*, *Wiley Wizard Computer Books Catalog* and *Wiley Science Editions*. Wiley's is packed with new and backlisted titles, all of which can be ordered online. GO JW

John Wiley and Sons' grand-opening, free-connect weekend: Sept. 17 and 18.







### Connecting with AT&T.

Communication. Whether it's across town or around the world. One-on-one between family members and friends or among a dozen business associates, simultaneously. Whatever your communication needs, AT&T most likely has products and services to meet them.

### Facts and fun at your fingertips.

The perfect place to learn about the myriad of communications tools available to you is at AT&T's Mall store. Called AT&T SEARCH, the database allows shoppers to learn about various products and services ... request free product brochures on everything from fax machines to AT&T's 800 service, from answering machines and telephones to computers and modems. Drop by AT&T online and you'll discover:

- A free mini-tour of the AT&T database
- Detailed information on AT&T's line of computers and consumer products
- An interactive quiz that helps identify the long distance services that are right for you
- The AT&T Chain Contest—your chance to win a different prize every month
- News on upcoming live conferences by telecommunications experts

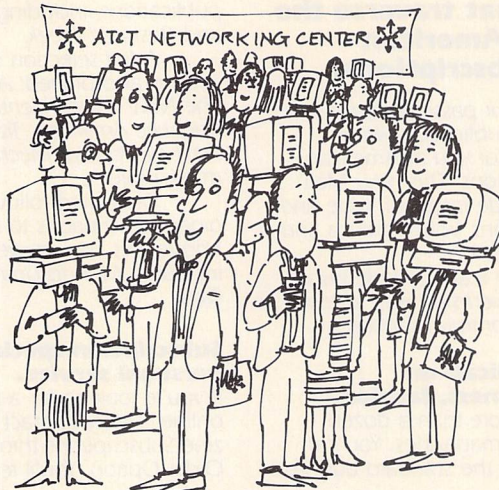
### AT&T's commitment to connectivity.

AT&T substantiates its ability to improve productivity by enhancing the ability of personal computer work groups to process, share and communicate information.

The very success of the personal computer in improving individual productivity has generated a new set of information management challenges, including the improvement of company-wide communication by providing more responsive access to central databases; and most importantly, the provision of information managers with total solutions within the framework of distributed processing.

### STARLAN: meeting the productivity challenge.

With programs such as STARLAN—a low-cost, high-performance personal computer network—you can learn how personal computer work-groups and data networking can improve your business.



## How to break the ice and start networking today

### Chat with an expert.

On Wednesday, Sept. 28 at 9 p.m., EDT, Tatiana Kobishcha, STARLAN product marketing district manager, will explain how these challenges are met with AT&T's systems solution of data products and services. The latest in AT&T's ongoing series of online conferences featuring various telecommunications and computer experts, this conference promises to be an

exciting one! For details, and to reserve a space, visit the AT&T database.

An AT&T solution will support your strategic business needs, whether you already have significant resources in place or are taking initial steps into personal computer networking.

For more information about communication solutions, GO ATT.

## MINI-SPOTLIGHTS

### New product and service lines at Computer Express.

For over three years, CompuServe subscribers have learned to rely on Computer Express for quality products, competitive pricing and superior service. Long an innovator in online merchandising, Computer Express has recently revamped and expanded its Mall store.

If you haven't been by lately, you're in for a few surprises, beginning with the all-new IBM Demo Library. This Computer Express exclusive allows users of IBMs and compatibles to actually download demos and create a visual image of select software products that are featured.

Other new products and features at Computer Express's Mall store include:

- Hundreds of software products for the Apple IIe, IIc, IIGS, IBM and Macintosh personal computers, all at discount prices. Plus hardware for the Apple, Macintosh and IBM.
- A comprehensive 300-page print catalog packed with products for the Amiga, Apple IIGS, IBM and Macintosh personal computers for only \$4, refundable with your first online order.



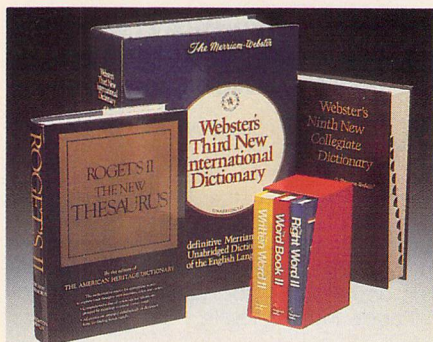
Apple IIGS

- An all-new Electronic Mailing List for immediate notification of special sales, promotions and new products.

### Shop for free Sept. 10, 11.

Because Computer Express believes that once you've shopped its store you'll be back again and again, they're offering you two days of free shopping this fall. Come in, introduce yourself and browse at your leisure on Saturday, Sept. 10, and Sunday, Sept. 11. The connect time is on Computer Express. GO CE





Reference books

## Hit the books with The Stationery Center.

Get ready to hit the books with The Stationery Center. Now featured online is a selection of the best reference books available, the latest in typewriters, includ-



Smith Corona XL 2000

ing the Smith-Corona XL-1000, and the Panasonic 2-speed microcassette recorder/notetaker. Weighing only 7 ounces, this portable recorder is perfect for recording lectures and classes. For all of your back-to-school needs, GO SC.

## Back to school at Shoppers Advantage.

Shoppers Advantage announces its back-to-school bonanza. It's your chance to save big on everything you need for academic endeavors and to win valuable prizes. Start shopping and saving Sept. 7. GO SAC

## Music Alley Online slashes prices.

Music Alley Online, offering you musical equipment from names you know at discount prices, has just announced additional price cuts. From now on, you'll save 30% on all products that list for more than \$125.

That means major savings on hundreds of products from major manufacturers. Browse the online selection of keyboards, synthesizers, MIDI sequencers, mixers, ROM/RAM packs, MIDI soft/hardware, amplifiers and more.

For the sounds of music—and savings, GO MAO.



Yamaha DX 21 synthesizer

## SDA's personal computer classroom.

Before the cerebral demands of fall semester take you by surprise, brush up on the three Rs with your personal computer. Visit Software Discounters of America for a wide selection of educational software, including *Math Blaster* by Davidson, *Think Quick* by Learning Co., *Speller Bee With Speech* by 1st Byte, *Term Paper Writer* by Activision and *Typing Tutor 4* by Simon & Schuster. GO SDA



Lindsey Michele Knoll

## Welcome, the newest Knoll.

Chuck and Tammy Knoll, proprietors of Walter Knoll Florist, are delighted to announce the arrival of the newest Knoll ... Lindsey Michele. Lindsey, the Knoll's first child, arrived on May 11 at 8:10 a.m. and weighed in at 6 pounds 14 ounces. Please join The Mall in congratulating the Knolls on their newest addition!

## See what you'll find online in The Mall's Catalog of Catalogs.

Imagine a complete online listing of all the print materials you can order at The Mall. It's here now—The Mall's annual Catalog of Catalogs. Conveniently organized by product category, the directory features dozens of different catalogs, brochures and booklets and is on The Mall's top menu. Many are yours for the asking!

Here are just a few:

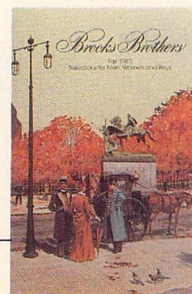
- R + R Direct's free full-color catalog of computer products and supplies. GO RD



- TSR Games Shoppe's free 112-page, full-color product catalog featuring hundreds of games. GO TSR
- The Stationery Center's new 1989

*Office Products Catalog.* Nine hundred pages packed with over 25,000 items. Cost: \$12, rebated with an order of \$45 or more. GO SC

- *The Metropolitan Museum of Art Christmas Catalog.* One hundred thirty-two pages, with more than 500 unusual gifts, reproduced from works of art in the Museum's collections. From The Metropolitan Museum of Art. GO MMA
- *Brooks Brothers Fall Selections.* A gathering of men's wear, women's wear and unusual gifts. Yours, gratis, from Brooks Brothers. GO BR





## Wanted: CD enthusiasts. Reward: free CDs and super savings from RCA's Compact Disc Club.

You've discovered the compact disc difference ... congratulations! Now discover an easy, economical way to build your CD library ... membership in The Compact Disc Club. Join anytime now through Oct. 11 and get three CDs for free when you agree to buy only one more selection at regular club prices during the next year. Make your selections online, choosing from hard rock, soft rock, easy listening, country and western and classical.



RCA Compact Disk Club offers a wide variety of artists from Andre Segovia to Led Zeplin



The best of compact disks from The Who, Carly Simon, Elton John and Harry Chapin

Hundreds of titles are listed, including the latest from Whitney Houston, Steve Winwood and George Harrison ... old favorites from Roy Orbison, Elvis Presley and Kenny Rogers ... masterpieces from maestros like Mozart, Beethoven and Bach. Simply browse the online catalog and pick three. You'll automatically be enrolled in the club and begin receiving regular mailings. Joining has never been easier.

### Special deals for current members.

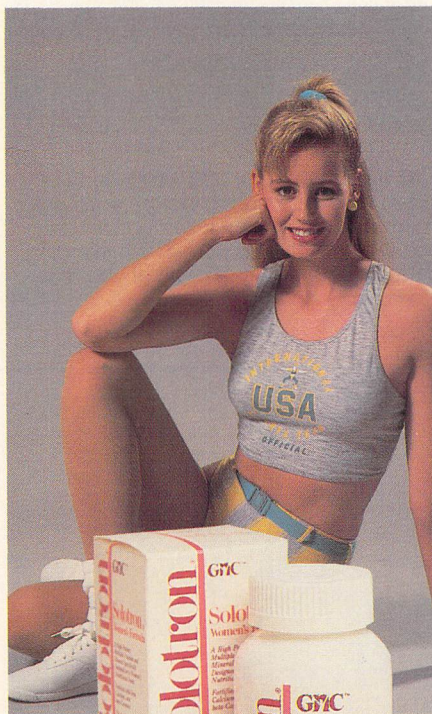
Current members are welcome, too! If you're already a member of the club, you're entitled to take advantage of extra savings online.

### Come to an open house.

Everyone is invited to The CD Club's open house. On Saturday, Sept. 10, and Sunday, Sept. 11, and again on Oct. 1 and Oct. 2, you'll pay no connect fees while visiting The Compact Disc Club. Mark your calendar now and make plans to GO CD.

## Good health to go—from General Nutrition Corp.

General Nutrition Corp. (GNC), America's leading nutritional supplier, is in the business of helping you lead a healthier life. Now, through its Electronic Mall store, GNC offers you quality products at the lowest possible



prices, backed by the GNC money-back guarantee.

Vitamins and minerals...cosmetics... exercise tapes. Give your fingers a workout browsing GNC's online selection. Featured products include daily multiple vitamins, minerals, children's vitamins and Vita Packs, as well as individual supplements such as calcium, potassium and zinc. To aid you in selecting the right supplements, the health benefits of each vitamin are explained online.

Other products featured online include Aloe Vera moisturizing cream, a sunless tanning lotion and Bruce Jenner's *Winning Workout Video*.

GNC offers all shoppers a free catalog and invites you to send your nutrition questions electronically. In the business of bringing you better health for more than half a century, GNC represents Q.S.S.P.—quality, selection, service, price.

For good health to go, GO GN.

## Show your support: shop online at the US Olympic Training Center gift store.

Now you can show your spirit for the US Olympic effort by shopping the United States Olympic Training Center online gift store. All proceeds from the sale of merchandise at this new Mall store will go to the US Olympic Committee, an organization dedicated to providing opportunities for American athletes of all ages and skill levels.

### Wear the rings.

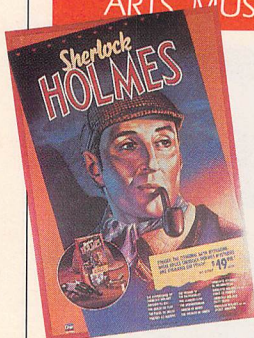
A variety of official US Olympic sportswear, gifts and souvenirs is showcased. Show your pride with a USA crew sweatshirt, a T-shirt of 100% cotton with the official US Olympic Training Center logo or a nylon duffle bag. Adult, youth and child sizes are available. Children's sizes—for future Olympians—feature a silk-screened Olympic logo.

Shop online. Or request a free copy of the Olympic Training Center's full-color gift catalog. Browse it at your leisure at home, then place your order electronically. To go for the gold, GO OL.





## ARTS, MUSIC & VIDEO



Sherlock Holmes video

### Classics on tape.

Dozens of classic films on video-tape. Select a Hitchcock chiller, such as *Lifeboat*, *Notorious* or *Rebecca*. Go sleuthing with Sherlock Holmes in *The Hound of the Baskervilles*.

Let Olivier entertain you in *Hamlet* or *Henry V*. From Magic Castle Video. GO MV

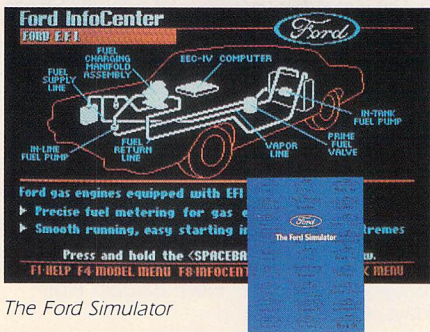


Advent calendar

### The Museum Christmas Tree Advent Calendar.

Includes a marvelous assortment of ornaments and toys to hang on the Christmas tree. Order now and start counting the days 'til Christmas. GO MMA

## AUTO

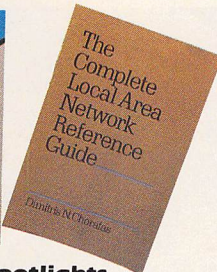
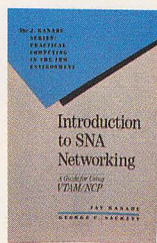


The Ford Simulator

### The Ford Simulator: test-drive at your terminal.

Software for the IBM-PC or compatible. It's filled with facts: about the latest technology, about Ford quality, about the 1988 Ford Motor Company cars and light trucks. And it's full of fun—the fun of taking to the track in four thrilling, test-driving, animated simulations, including *The Drag Strip*, *The Slalom* and *The Grand Prix*. From Ford Motor Co. GO FMC

## BOOKS & PERIODICALS



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## BUSINESS & FINANCE

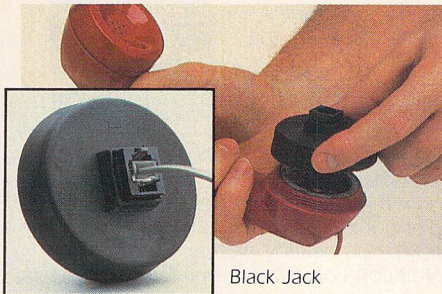


Max Ule

### Discount brokerage service at your keyboard's command.

Online order entry ... online new account applications ... complete stock, bond and option trading with direct wires to all of the major exchanges. From Max Ule & Co. GO MU

## COMPUTING



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### Make any telephone a telecommunicator.

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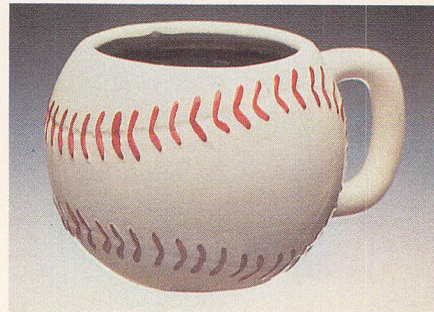
## GIFTS & COLLECTIBLES



Breakfast-in-bed tray

### Pre-made: a balanced breakfast in bed.

Start his or her day right with this luxurious breakfast-in-bed tray. Each tray includes a miniature tea sachet, three miniature preserves, almond biscuits, strawberry bonbons, napkins and a pack of napkin rings. From Crabtree & Evelyn. GO CR



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### Wake up to sports in the morning.

Sports fans' coffee mugs ... choose baseball, golf, soccer, tennis or basketball. Only \$6.95 each. From Coffee Emporium. GO COF

## THE MEN'S SHOP

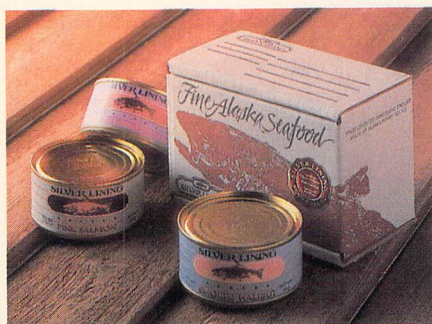


### Pullover V-necks of 100% cashmere.

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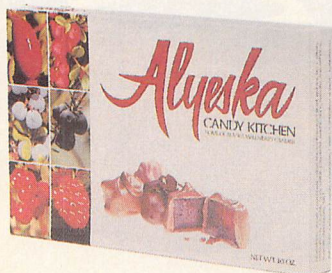
## FOODS & FLOWERS



Alaska salmon and halibut

### From the deep South: gourmet you'll relish.

**Old South Jams.** Original plantation recipes. Select a three-pack, including blackberry jam, guava jelly and Georgia peach preserves. Or choose a six-pack, with fig preserves, pure pear preserves and green pepper jelly added. From Florida Fruit Shippers. GO FFS



Chocolate-covered wild berry candy

### From the North: Alaska's finest foods.

Chocolate-covered wild berry candy made with Alaskan berries. Smoked Pacific salmon ... caught, smoked and packaged in Ketchikan. Alaskan herbal tea made by the Athabaskan Indians in Fairbanks.



Alaskan birch bark gift basket

Alaskan Birch Bark Gift Baskets, brimming with potpourri, tea, salmon, honey and candy. Each handsome basket is made by members of the Tanana Chiefs Council in Fairbanks and contains only Alaskan-grown, handmade items. From Ivory Cache. GO IV

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Tango Plus™ spa

### Unwind with five bubble jets in this at-home spa.

The Sojourner Spa ... an invigorating bubble massage spa with a body-contour, lumbar-support, sculptured lounge for one and bench seating for four more. Measures 89 inches in length by 77 inches wide and 30 inches high. Weighs 650 pounds and holds 300 gallons of water. Perfect for indoors or outdoors, home or office.

Includes thermal insulating cover that minimizes heat loss and chemical and water evaporation. Also includes a deluxe control system, underwater lights and a foot massage water jet as well as five adjustable water jets. From Rin Robyn Pool 'N Patio. GO RR

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## COMPUTING



Apple IIGS

**The new Apple IIGS.**

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## THE WOMEN'S SHOP



Obsession

**Established scents.**

Select from over a dozen fragrances for her, including Liz Claiborne, Opium by Yves Saint Laurent, Obsession by Calvin Klein and Beautiful and White Linen by Estee Lauder. From Harris' Scent-Sations. GO HR

**Introducing Bath & After.**

Inside\*Outside Lingerie announces the opening of an all-new section ... Bath & After. Select from a variety of fine products, including the all-natural Perlier honey cream bath, moisturizers, hand creams and bath foams. From Inside\*Outside Lingerie. GO IO

## ARTS, MUSIC, VIDEO

- EMC** Express Music ★  
**MV** Magic Castle Video  
**MMA** Metropolitan Museum of Art ★  
**MAO** Music Alley Online  
**RCA** RCA Music Service  
**TC** Tele-Charge—Theatre tickets  
**WB** Waldenbooks ■ ★  
**WH** Windham Hill † ■ ★

## AUTO

- DU** ABC Compu-Lease  
**AQ** Autoquot-R  
**AV** AutoVision  
**BU** Buick Magazine ■  
**FMC** Ford Motor Co. ■

## BOOKS/PERIODICALS

- AS** American Magazine Subscriptions †  
**AN** Antic Online  
**BAL** Ballantine Books  
**DJ** Dow Jones & Company  
**MH** The McGraw-Hill Book Co. ■ ★  
**MER** Mercury House  
**PB** Penguin Books By Mail † ■  
**BK** Small Computer Book Club  
**TL** Time-Life Books  
**JW** John Wiley & Sons † ■ ★

## BUSINESS &amp; FINANCE

- INC** Business Incorporating Guide  
**DJ** Dow Jones & Company  
**HRB** H&R Block  
**HRA** Halvorson Research Associates †  
**IS** Investment Software ■  
**MU** Max Ule Discount Brokerage  
**NN** NewsNet

## CLUBS &amp; MEMBERSHIPS

- MT** Moment's Notice ■  
**KC** New York Kennel Club  
**RCA** RCA Music Service  
**SAC** Shoppers Advantage  
**BK** Small Computer Book Club  
**TL** Time-Life Books

## COMPUTING

- AN** Antic Online  
**ATT** AT&T ■  
**PRT** Butler Graphics  
**CDA** CDA Computer Sales ■ ★  
**CE** Computer Express ★ ●  
**DM** Direct Micro ■ ★  
**IS** Investment Software ■  
**MM** Marymac Industries  
**PT** Paradise Technology  
**RD** R + R Direct ■ ★  
**SAF** Safeware Computer Insurance ■  
**SDA** Software Discounters of America  
**SP** Some Things Special

## GIFTS &amp; COLLECTIBLES

- BL** Bloomingdale's †  
**COF** Coffee Emporium  
**CR** Crabtree & Evelyn ■ ★  
**DS** Desserts Direct  
**DD** Don's Dollhouse & Miniatures ● ★  
**FFS** Florida Fruit Shippers  
**IV** Ivory Cache ■ ★  
**OL** Olympic Gift Store ■ ★  
**PF** Pepperidge Farm ■ ★  
**SIM** Simon David  
**SP** Some Things Special  
**WK** Walter Knoll Florist ●

## GOURMET FOODS &amp; FLOWERS

- COF** Coffee Emporium ■  
**DS** Desserts Direct  
**FFS** Florida Fruit Shippers ■  
**MC** Morrell and Company ■  
**PF** Pepperidge Farm ■ ★  
**SIM** Simon David  
**WK** Walter Knoll Florist ●  
**WE** Williams & Eeden Garden Center † ■ ★

## HEALTH &amp; BEAUTY

- CR** Crabtree & Evelyn ■ ★  
**EE** Elite Eyewear ■ ★  
**GN** General Nutrition Corporation ■ ★  
**HR** Harris' Scent-Sations

## HOBBIES, TOYS &amp; PETS

- AC** Aero Academy †  
**DD** Don's Dollhouse & Miniatures ★ ●  
**HTH** The Heath Co. ■  
**HC** Hobby Center Toys  
**KC** New York Kennel Club  
**PW** Petworks  
**TSR** TSR Games Shoppe ■ ★  
**WE** Williams & Eeden Garden Center † ■ ★

## THE MENS SHOP

- APC** Apparel Concepts for Men ■  
**BR** Brooks Brothers ■ ★  
**IO** Inside \* Outside Lingerie ★

## THE WOMENS SHOP

- BR** Brooks Brothers ■ ★  
**HR** Harris' Scent-Sations  
**IO** Inside \* Outside Lingerie ★  
**IV** Ivory Cache ■ ★

## MERCHANDISE &amp; ELECTRONICS

- ARI** Air-Conditioning & Refrigeration Institute  
**AE** Anka Electronics ■ ★  
**ATT** AT&T ■  
**BL** Bloomingdale's †  
**ORD** CompuServe Store  
**CFD** Crutchfield ■ ★  
**HS** Hammacher Schlemmer ■ ★  
**HTH** The Heath Co. ■  
**PS** PanSon Electronics ★  
**SAC** Shoppers Advantage

## OFFICE SUPPLIES &amp; SERVICES

- PRT** Butler Graphics  
**DM** Direct Micro ■ ★  
**EX** Executive Stamper  
**RD** R + R Direct ■ ★  
**SAF** Safeware Computer Insurance ■  
**SC** Stationery Center ● ★  
**TII** TII Translation Service

## SPORTS &amp; LEISURE

- AC** Aero Academy †  
**CO** Char-Broil Grill Outlet ■  
**EE** Elite Eyewear ■ ★  
**HS** Hammacher Schlemmer ■ ★  
**OL** Olympic Gift Store ■ ★  
**RR** Rin Robyn Pool 'N Patio ■

## TRAVEL &amp; VACATIONS

- AF** Air France ■  
**BH** Bargain Holidays of Florida  
**EV** ENDLESS VACATION TRAVEL ★  
**MT** Moment's Notice  
**OAG** Official Airline Guide

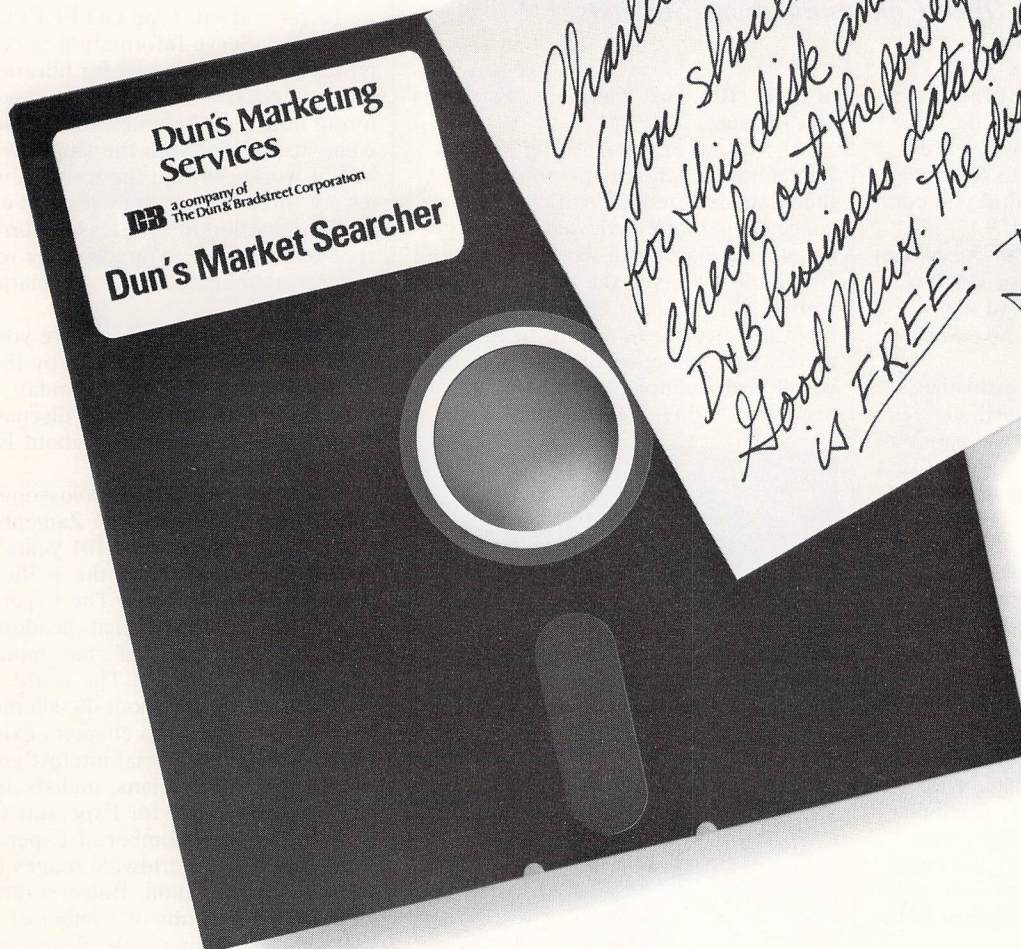
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# Languages Unite

## Esperantists Strive to Open Communication Channels

by Terri Stone

Picture this: You step off the plane in gay Paris and casually ask the taxi driver to load up your baggage. Later, you take a weekend jaunt to the Swiss Alps for snow skiing and find you converse easily with the locals.

What—besides the expansive budget—is unusual about this? For starters, you are not multilingual. You don't know sign language. And, no, everyone doesn't speak English.

For anyone who has ever likened high school French or Spanish classes to the "thrill of victory or the agony of defeat," this scene surely sounds like a farce. Yet it's not: You are all speaking Esperanto.

Esperanto, like English, is a language that crosses geographic and territorial boundaries. Unlike English, however, the language is not littered with bewildering eccentricities of spelling and pronunciation. Esperanto is strictly phonetic and comprises only 16 easily memorized rules of grammar, compared to 728 endings for irregular verbs in the English language. The language also boasts a basic vocabulary derived mostly from Indo-European roots. And, Esperantists say it's easy to learn (in just 100 hours or less, say experts), and no foreign language background is needed.

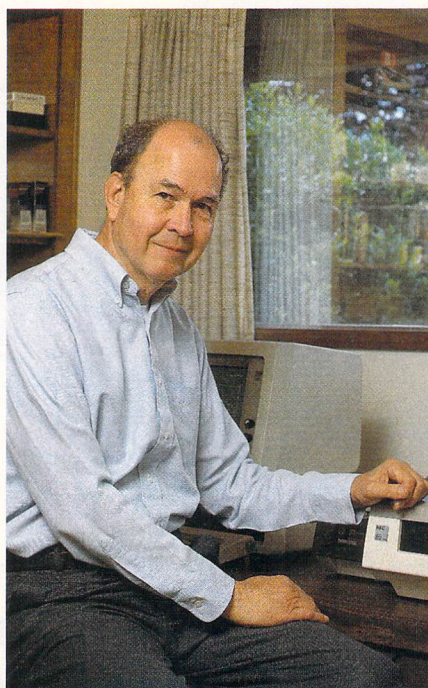
"To most people, Esperanto sounds like Spanish or Italian because the pronunciation was fixed by an Italian actress at the first convention," explains Jim Deer, president of the Portland, Ore., Esperanto group and a long-time Esperantist on CompuServe's Foreign Language Education Forum (GO FLEFO).

"The language is simple and logical. It is interesting to be able to handle a second language," he says. "In college I studied German and French and was thoroughly bewildered. I did not learn much. With Esperanto, I taught myself."

Esperanto was developed to make communicating easier for people of diverse languages who lived in the same town of Bialystok, Poland. The story goes back a little more than 100 years, when L. Ludovic Zamenhof decided to find a way to improve communications in this multilingual town. An ophthalmologist by trade, he wanted to help build understanding and trust among his neighbors—an interesting potpourri

of Poles, Russians, Germans, Estonians and Latvians.

In 1887, at an enterprising age 28, Zamenhof launched Esperanto. Although considered an artificial language, Esperanto is viewed by many language experts as a work of genius. Its simplicity lies in the basic root words, which can be changed from noun to adjective to adverb to verb merely by tacking on the appropriate vowel. For example, the root "vid" becomes "vido" (sight), "vida" (vi-



Logical linguist: Deer

sual), "vide" (visually) and "vidi" (see).

Each Esperanto letter has only one sound in all uses, and the accent comes on the next-to-last syllable of every word. Also, there is no gender distinction and only one "the" for plural and singular nouns.

A few more examples: "Many people study Esperanto" translates to "Multaj personoj studas Esperanton." "Esperanto is a good language" translates to "Esperanto estas bona lingvo." And, "The room is clean" becomes "La chambro estas pura."

Dolores DeFrancis, an Esperantist in Ohio, says an interest is all you need to get started learning Esperanto. "It's

supposed to be the easiest language to learn," she says. "You just need a little time and patience."

To get started, type GO FLEFO at any CompuServe Information Service prompt, then select LIB for libraries. Esperanto has a message board and a forum library to help newcomers become acquainted with the language and how it works. Within the forum libraries are three introductory lessons and the introduction to a 10-lesson correspondence course. You also may request a complimentary pronunciation tape.

If talking one-to-one is more your style, you are invited to drop by the forum on the first or third Sunday evening of each month. The discussion is in English and questions about Esperanto are welcomed.

Esperanto, while never blossoming into the universal language Zamenhof envisioned, has survived 101 years and is the most successful of the artificial or man-made languages. The Esperanto League for North America, headquartered in El Cerrito, Calif., has approximately 1,000 members. The world organization boasts about 40,000 members. Local Esperanto chapters exist worldwide. Even special interest groups—hobbyists, vegetarians, nudists and more—are available for Esperantists.

The estimated number of Esperanto-speaking people worldwide ranges from 1 million to 16 million. Bulgaria ranks number one in terms of number of speakers, and China is the fastest growing.

Such international cooperation has given Jim Deer the opportunity to meet and converse with people of many countries. "You can travel to foreign countries and look up the local Esperanto clubs. You will almost always be welcomed and asked to speak at a meeting of the local clubs," he says.

Deer believes Esperanto can help spread the message of world peace.

"The promotion of contacts with foreign countries on an equal language basis will in some measure help," he says. "I have contacts with clubs in China, the Soviet Union and several other countries. We exchange ideas, even cookies sometimes."

Why not wipe that memory of your French class away and give Esperanto a try? "Esperanto is the world's greatest hobby—and you can quote me," says Deer.

Terri Stone is a free-lance writer based in Columbus, Ohio. Her CompuServe User ID number is 76004.1643.



## On the Singles Circuit

by Ben Knox

On those days or nights when you need a diversion from either a routine or stressful job, and you find everyone else is busy enough without you, tap into the adventure, fantasy, parlor or sports games CompuServe offers for single players. You will be amused and challenged, and, most likely, you will discover that being "single" can be entertaining.

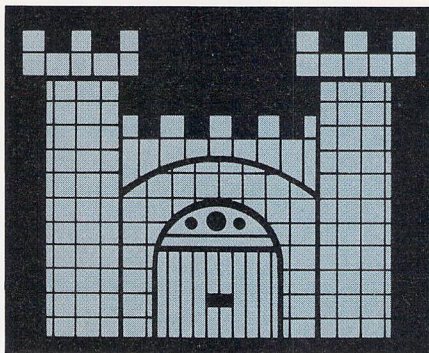
### Adventure Games

Adventure games (GO ADVENT) have sometimes been called "interactive fiction" because you control a character through a land described on your screen. In addition to the move commands, such as North, South, Forward, Up and Down, your character can execute other actions, such as picking up objects and opening doors. Throughout your travels in the computer-generated game, you will come across characters that can help or hinder you.

If you get stuck, you can find clues for some games in The Electronic Gamer (GO TEG), where "walkthrus" point out what you need to do in each game to win. And, because adventure games usually take a long time to complete, you can save your position between plays.

CompuServe provides 16 adventure games for single players, including:

- *CastleQuest* takes place in a castle in Romania's legendary Carpathian Mountains. After a car accident, you find your way to a mysterious castle. The object of the game is to find the master of the castle and deal with him as needed, while looting the castle of its treasures.
- *House of Banshi* is CompuServe's version of the original *ZORK*, which is available for some personal computers. It is arguably the most difficult adventure game on any computer.
- *Original Adventure* is the game from which all other adventures, for both micro and mainframe computers, evolved. The object of the game is to explore a cave, find a quantity of treasures and deposit them back in the building you start from.
- *New Adventure* is the enhanced version of the *Original Adventure* game, providing more challenges and dangers for the skilled single player.
- *Scott Adams Adventures* are a series of 12 adventure games using similar



commands and common characters. The Scott Adams series includes *The Sorcerer of Claymorgue Castle*, which is the adventure of Beanwick, an apprentice to the sorcerer Solon. His mission is to recover the "stars of power," stolen from Solon by the nefarious warlock Stindath.

- *Spider-Man*, alias Peter Parker, a free-lance photographer and adventurer in New York City, has developed a spider-like web-spinning device. The object of the game is to fight evil and collect gems.
- In *Fantastic Four*, you control two characters: the Thing and the Human Torch. You can switch between the characters at any time. The two often have to help each other.

Other Scott Adams Adventures available on CompuServe are *Adventure Land*, *Pirate Adventure*, *Secret Mission*, *Voodoo Castle*, *The Count*, *Strange*, *Mystery Funhouse*, *Pyramid of Doom* and *Ghost Town*.

### Fantasy Role-playing Games

Fantasy games (GO FRPGAMES) allow you to choose the type of character you want to play as. Before beginning the game, you are given a list of attributes, such as strength, intelligence, wisdom, endurance, dexterity and hit points. The computer selects random values for each attribute. If you do not like the values offered, you can ask for another set to be displayed until you are satisfied.

*BlackDragon* is set in a multilevel maze. You can use magic in the maze, and you will encounter many strange and wondrous creatures (most of them deadly). There are nine levels through which you must journey to accumulate treasure and, by converting gold into experience points, to gain strength. To win, you must be strong enough to conquer the Arch Demon on the final

level of the maze.

In *Castle Telengard*, you venture into a castle seeking adventure and treasure. The object is to find the mysterious Orb of Power and amass as much experience and wealth as you can. The castle has 400 locations on each of its 20 floors, so be prepared to map the way back out.

### Board and Parlor Games

CompuServe offers computerized versions of popular board and parlor games (GO BPGAMES). One you can play by yourself is *Hangman*, a word game. The computer selects a word and you try to guess what it is, one letter at a time. For each wrong letter guessed, a portion of a picture of a hanged man is added. If the picture is completed, you lose the game.

### Simulation and Sports (GO SSGAMES)

Have you ever wanted to coach a football team? In *Advanced Digital Football*, you are the team coach and can call the shots on offense and defense. When you start, you might prefer to rely on established plays, but as you become more experienced, you can create your own. ADF is a challenging, time-consuming game, but it's never out of season.

*Golf* is played on the 18-hole CompuServe computer course. You will be told after each shot how far you are from the pin. You have a variety of clubs, including four woods, eight irons, one wedge and one putter.

The advantages to single-player games are more than just solo entertainment. You will find single-player games easier to get into than multiplayer games but just as much of a challenge. Further, some of the single-player games—particularly the adventure games—employ similar commands and procedures to those used in multiplayer games. Thus, playing single-player games gets you in shape for the more difficult multiplayer games.

If you need help or want to discuss tactics about the games you play, visit the Gamers' Forum (GO GAMERS). Here you will find message sections covering all types of games, as well as files you can download containing hints and tips.

All CompuServe games are accessible from the main Games menu (GO GAMES).

*Ben Knox is a free-lance writer based in London. His CompuServe User ID number is 76703,3025.*



## Hooked on Fish Tales

by Holly G. Miller

Steve Meyer was fishing for information on Soviet maneuvers in Afghanistan when he was first hooked by "Fishnet."

A top-level government consultant and an MIT professor of defense and arms control study, Meyer, 35, fields up to a dozen calls a day from journalists in need of comments on nuclear weaponry and Soviet policy. By monitoring online news reports, he anticipates the calls and questions that erupt following each government announcement, news bulletin or treaty negotiation session.

It was after such an online excursion that he took a detour and found the Aquaria and Tropical Fish Forum (GO FISHNET), an area he now says provides him with "part psychotherapy and part vacation" at least three times a day.

"I'm in a strange business, that's the best way I can describe it. If I'm in Washington, for instance, I may spend a couple of days at the defense department or the state department or testifying before Congress trying to give advice, work out positions or help people understand what's happening in the Soviet Union," Meyer says. "The meetings run late, the questions are serious, and the environment is tense. What I've found really makes a difference is going back to my room where I have a laptop, plugging it in and tapping onto the message board. It's like stopping by the neighborhood bar after work and knowing all my friends will be there."

If his job is out of the ordinary, so is his hobby. Not a traditional aquarium keeper, Meyer became interested in fish after he transformed the grounds around his Sudbury, Mass., home into elegant Japanese gardens. Next, he added a pond and stream, and finally, he curbed a pesky mosquito problem by stocking the water with fish.

The gardens grew and so did the fish. Soon his ponds were bigger than his gardens and he had graduated from goldfish to Japanese koi, an exotic breed that can live to be 100 and can cost as much as \$25,000 each. When questions surfaced, he turned to the ATF Forum for answers. No luck. There was no special library just for koi collectors.

"After Steve and I met online last summer, he offered to promote an area specifically for goldfish and koi," recalls John Benn, ATF Forum adminis-



Tending Japanese gardens is fishy business: Meyer

trator. "He's since made the area one of the most productive ones. A few months ago, I asked him to help handle the beginners' questions. Membership response to his participation has been overwhelming in support of the knowledge and scientific background he brings to our area."

The admiration works both ways. Meyer, who not only has access to MIT's extensive science libraries but also the Harvard stacks, believes the ATF Forum contains data unavailable anywhere else. Highly technical information is as near as the forum library and as immediate as the message board.

"For some reason your favorite, most expensive fish always chooses Saturday night at 10:30 to get sick," Meyer jokes. "The stores are closed, you can't get medication and there is no one to talk to. What the ATF Forum lets you do is sign on and say, 'Help! My fish is doing this or that and is having these symptoms.' Then you get offline and wait. When you check in again, there are usually a half-dozen messages waiting for you. That kind of emergency hospital service is crucial."

Although time is a problem for Meyer—to keep up with his profession he reads several hundred articles and dozens of books in Russian each

month—he begins and ends each day online.

"The first thing I do in the morning is fix a cup of coffee, turn on the computer and go into the ATF Forum to see which of my West Coast friends have left me messages during the middle of the night," he says. "Then, around noon, I check in again in case anyone has an emergency. People may not identify with fish as they do with dogs and cats, but if you've owned a pet for years, the fact that it lives in water and is a little slimy doesn't affect your closeness to it."

In the evening, he logs on for an informal conference. He and his pals around the country trade fish tales (all true) for about 45 minutes.

"Usually, one of my friends from California is there, another from Houston joins us, then a couple more from Missouri and Ohio stop by," Meyer says. "In most cases, we don't know what the others do professionally during the day. We only know we're online at the same time to recap our days in terms of what we enjoy in common."

*Holly G. Miller is a free-lance writer and college professor based in Anderson, Ind. She is a contributing editor of The Saturday Evening Post and Indianapolis magazine. Her CompuServe User ID number is 70007,2345.*









Washington Convention &amp; Visitors Association

**Monumental metro:** Washington D.C., features official sites

## A Capital Experience

*Visitors Glimpse History, Politics and Art in Washington, D.C.*

by J. Scott Orr

A visit to the nation's capital should be more than a quick tour of the famous monuments, museums and government offices, for what is available to the curious visitor is a city of art, precious gems, official hobnobbing, fine dining and more. It takes a little planning to fit it all in, and perhaps a map of the famous Metro, but the end result can be an unbeatable trip.

### Sightseeing

The National Mall and the Smithsonian Institution are the places to start for most visitors in Washington. For art lovers, there is art from all periods. You want history? From ancient mummies to the Declaration of Independence to the space shuttle, it is here. And for monuments, the Washington, Lincoln and Jefferson monuments and the Vietnam Veterans Memorial are within easy walking distance.

But don't be fooled by the name—seeing the National Mall takes a lot more time, patience and stamina than your average shopping mall. To avoid energy-draining backtracking and foot-numbing line standing, plan ahead. And, above all, don't try to see it all in one day.

Take a day to see the various art museums. Stroll through the outstanding permanent collection at the National Gallery of Art. The East Wing of the National Gallery is host to the world's top touring exhibits. Then, for

modern art, cross the Mall to the Hirshhorn, the massive cylindrical museum that offers an eclectic collection of moderns from Degas to Warhol. On the south side of the Mall are the recently opened underground museums of African and Asian art.

Also on the museum circuit, visit the Air and Space Museum, one of the most popular museums in Washington, featuring exhibits on flight from Kitty Hawk to Cape Canaveral. The Museum of Natural History is where you can see the Hope diamond, but it is just one of hundreds of striking gems on display. This museum could take up a day in itself, so take your time and plan your route. Next door is the Museum of American History, which features Americana and historic exhibits from all periods.

The monuments are awe-inspiring day or night, but there are smaller crowds the later you go. (Insider's tip: forget about going to the top of the Washington Monument, unless you think it's worth standing in a long line for a 30-second glance out a tiny peephole. Photos of the view are available at any souvenir stand.)

### Official Washington

Public tours are available for Washington's two most noted buildings—the Capitol and the White House. However, if you want the best tours, call your state representatives. Their offices can arrange special visits for

you. You might even come away with passes for a VIP tour of the White House (these tickets are rare and are coveted by even the most influential visitors in Washington, but you might get lucky). In any case, a stop in your representative's office is sure to yield maps, tour guides, candy and sometimes paperweights and other souvenirs.

### Dining

If your days are best spent as a tourist, then be part of the city of Washington at night. Here is a handful of restaurants that will not only offer you superior food at good prices, but will also get you into some of the city's most interesting and picturesque neighborhoods:

At Wolensky's Bar and Grill on Pennsylvania Avenue downtown you'll find a friendly tavern upstairs and good American cuisine downstairs. They've got hamburgers and sandwiches, steaks and chops, a fine selection of salads and the famous "blue plate special"—meat loaf, lumpy mashed potatoes and canned peas.

Two Quails on Massachusetts Avenue on Capitol Hill has to rank a solid 10 for atmosphere. It is a tiny restaurant inside two turn-of-the-century townhouses that are divided into separate rooms and decorated in the Victorian style. It features a varied *prix fixe* menu. Try it for Sunday brunch.

La Fourchette on 18th Street in Adams Morgan is in the middle of Washington's "nouveau hip" zone and features good French food in a casual atmosphere at reasonable prices. It has a few tables on the sidewalk, as does its next door neighbor, Cafe Lautrec, which are good for dining, espressos, desserts, cocktails and people-watching.

The Kozy Korner on 20th Street near Dupont Circle has to be Washington's best bargain. While it may be lacking in atmosphere, it can't be beat for a good meal at cafeteria prices. Try it at "happy hour," when the already low drink prices are slashed even more.

Paper Moon on 31st Street in Georgetown is a trendy nightclub featuring a sleek minimalist decor and a menu that includes a variety of pasta dishes along with an eclectic collection of personal-sized pizzas.

Jo & Mo's and Duke Zeiberts on Connecticut Avenue downtown are two of the best places to get a public glimpse of official Washington—they are two of the top power-lunching venues in power-lunch-crazed Washington. There's no telling what kind of deal is being cut at



the next table. Both are pricey and reservations are recommended.

## Transportation

Leave the car at the hotel. Washington's mass-transportation system is excellent and features one of the nation's finest subway systems—the Metro. Maps are available everywhere and a standard ride is only 80 cents.

Taxi cabs are plentiful and inexpensive. They operate on a zone system so you must check the map in the back of every cab to determine your fare. (Insider's tip: Get into the cab before

telling the driver your destination—sometimes he'll take off if you're taking a long ride that would bring a small fare.)

## Hotels

Hotels with reasonable rates are rare, but try these: the Capitol Hill, the Hotel Lombardy and the Bellevue Hotel. Special mention should go to the Tabard Inn, which appropriately calls itself a country inn in the heart of the city.

*J. Scott Orr is the Washington correspondent for the Newark Star-Ledger and Newhouse Newspapers. His CompuServe User ID number is 70007,1165.*

## Planning a Grand Tour

by *Lindsy Van Gelder*

"Armchair travel" is the kind of trip that's ideally taken on a Sunday afternoon in a Barcalounger, with a six-pack and a pile of Michelin and Frommer guides to help fuel your imagination.

Less well-known is the excursion that might be called "keyboard travel." It's a lot like the armchair version in that you can sit at your computer and read about transportation, hotels and tours anywhere in the world. But thanks to technology, the information you get at the keyboard is vastly more up-to-date than the kind you get in the Barcalounger—and even better, you can often act on it, right then and there.

For instance, imagine that you have to fly from New York to Silicon Valley on business, and from there to Hong Kong. In between, you've decided to take some rest and relaxation, first in California and then in Hawaii. Your first stop would probably be the Official Airlines Guide (GO OAG), which can give you detailed fare and schedule information for every leg of your trip. Do you think you might want to fly into San Jose instead of San Francisco? Directly into Maui rather than via Honolulu? It's all there. Thanks to a new command on OAG, you can now check flight availability, too.

Next stop is Travelshopper (GO PARS) to check car rentals. Menu prompts ask you the dates you'll need the car and the type of car you prefer (from economy to luxury). Unless you have a company preference, you'll get a print-out of all the comparable rates: for example, if you want to rent a luxury sedan in San Francisco, you have a choice of 15 companies whose daily rates range from RPM's \$29.89 with unlimited mileage to Hertz's \$59.99 plus 30 cents a mile. When you choose

which company you want to rent from, you can make a reservation from your keyboard.

Once you've nailed down your transportation plans, you'll need the ABC Hotel Guide (GO ABC) to see what's available in all price ranges and with various amenities at all your destinations. In Hong Kong, you're not worried about money, but you do want a hotel that's centrally located and has both a business center and a fitness center. Ten hotels fit the bill. You're tempted by the Regent Hong Kong (featuring marble floors and glass-to-ceiling windows in the public areas, pink marble bathrooms with sunken tubs, and especially the Daimler/Rolls Royce service which meets incoming flights at Kai Tek International Airport), but you also like the Furama Inter-Continental, which has a full-service business center with cable, telex, facsimile and word processing machines.

Before you move on to the fun part—planning your non-business time—let's make sure that there are no barriers to your trip. GO VISA to see if there are any special requirements for entering Hong Kong (no), GO STATE to see if there are any State Department advisories about problems in the region (no again), and GO IUS to see if Information USA/International has any tips on where to learn Chinese inexpensively (yes).

Onward now to West Coast Travel (GO WESTCOAST), whose new 14-chapter Silicon Valley Guide contains information on everything from a history of the valley's wine production (the first "mission" grapes were grown by Franciscan fathers for sacramental wine purposes) to the hours of winery tours and how to get there from the expressway, and from the architecture of Stanford University to that of another California institution—the shop-

ping mall!

If you want to spend time in the seaside town of Santa Cruz, the guide will tell you the average high temperature (69 degrees), where to get the best seafood meal (Sea Cloud: order the coho or the local halibut), why the boardwalk is a musical landmark (Gershwin's "Rhapsody in Blue" was introduced here by Paul Whiteman's Orchestra more than 50 years ago), and how many people have taken "white-knuckle trips" on the Giant Dipper rollercoaster since 1924 (28 million).

You also can discover events that occur throughout Silicon Valley—such as "the most famous farm and food festival in the peninsula region" and the annual Gilroy Garlic Festival held every summer. (Gilroy produces 90 percent of the nation's garlic, according to the guide, and Will Rogers once noted that it was "the only town in America where you could marinate a steak by hanging it out on the clothesline.")

Press on to the Hawaiian Concierge (GO HAWAII), where you can learn about and then book just about any kind of tour, from dolphin shows to dinner cruises to helicopter rides. Do you like horseback riding? In Maui, "on the slopes above Kaanapali, you can ride the Hawaiian up-country like nowhere else." The price is \$66.50 a person, including a delicious lunch of ribs, salad, chili, ice tea and guava juice. Or maybe you'd prefer a few hours on board the six-passenger USS Minnow, fishing for marlin, at \$88.40 for a six-hour share. (The Concierge also features plenty of less-expensive activities, such as a guided group hike to the Diamond Head crater floor in Waikiki, with a suggested donation of \$3.)

Maybe instead of staying at a hotel when you're in Hawaii, you'd like to charter a yacht. The WorldWide Exchange (GO WWX) lists a Honolulu-based company offering 30- to 43-foot yachts off Waikiki and Kaneohe Bay, available for half-day snorkeling and picnic tours, inter-island vacations from three days to two weeks, and sportfishing and sailing instructions. Other yachts are available for large parties, convention groups and weddings. Rates start at \$35 per person.

Now you can turn off your computer, settle back in your Barcalounger, and dream—until it's time to go to the airport.

*Lindsy Van Gelder writes for Ms., The New York Daily News, Town & Country, Rolling Stone and other magazines. Her CompuServe User ID number is 70007,1416.*



## Tip of the Month

Ken Johnston, an Ohio State University graduate with a Bachelor of Arts degree in Communication, is a CompuServe Customer Service representative from noon to 9 p.m., Monday through Friday.

Johnston enjoys CompuServe's Executive News Service and the troubleshooting and problem-solving aspects of being a Customer Service representative. "Subscribers should be prepared to describe any problem with as much detail as possible to the representative. This helps tremendously to quickly resolve the situation."



**Problem-solver:** Johnston

## Gift of Time

*Online Today* offers members the chance to win 10 hours of standard service connect time (a \$60 value) by writing a 200-word essay on how they use CompuServe's Information Service.

The essay should be typed double-spaced and sent to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or via an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

The winning essay will be published in *Online Today*.

## Ask Customer Service

**Q: I'm having problems searching Grolier's Encyclopedia. Every search term I enter gives me a message that says, "I don't recognize that command. Key H for Help !"** What's wrong?

**A:** To search a topic in the encyclopedia, you must make sure that you are within the encyclopedia and not in the area of help information about the encyclopedia. To do a search, type GO AAE at any prompt and select Option 2, "Access Online Encyclopedia."

**Q: How do I download information from Peterson's College Database?**

**A:** You can save the information that comes across your screen in three ways: First, you may be able to send it directly to your printer. This may be slow, however. Another option is to capture the information in a RAM buffer, a temporary storage area within your communications software. You then can print the buffer or save it to a file on your disk. Another option is to open a log file, which writes information directly to your diskette. All methods of saving online information are functions of your communications software. For specific information, consult your software documentation.

**Q: What kind of medical information is available on CompuServe?**

**A:** There are three searchable databases and two forums containing medical information. The first is PaperChase, provided by Beth Israel Hospital of Boston. PaperChase contains more than 3 million references indexed from 3,400 journals. The NORD Services and Rare Disease

Database (GO NNORD) has information on the causes and treatments of hundreds of diseases. In addition to these databases, helpful information can be found in IQuest, the Health Forum and the Cancer Forum. For a complete list of areas concerning medicine, type FIND MEDICINE at any prompt.

**Q: IQuest seems to have hundreds of databases. How do I know which one to search?**

**A:** There are hundreds of databases, including medical databases, available through IQuest. If you know which one you want to search, you can specify it by using IQuest-II. If you do not have a specific database in mind, you can select IQuest-I. You will be prompted for information on the topic you want to research. Based on that information, IQuest will provide a database for you. A list of databases available in the IQuest directory online will give you information on whether the full text of the publication is online, its publication dates and how often it is updated. Also, typing SOS while you are in IQuest will put you in contact with an IQuest research specialist who will be able to answer questions about particular databases.

*These answers and more are available in Customer Service's Question & Answer Database. You can find answers to questions about billing, logging on, using forums, sending EasyPlex messages, using the Personal File Area, setting up a personal menu and more. Type GO QUESTIONS at any prompt on the CompuServe Information Service.*

## Learning Online

It seems nearly impossible to log onto CompuServe and not learn something new. The CompuServe member who accesses the news services and databases will be "in the know." Whether it is the current trading price of IBM on the New York Stock Exchange or the temperature in Palm Springs, Calif., the information can be an advantage to the person who uses it wisely.

For what I have learned and the people I have met, CompuServe is well worth the cost to me.

I challenge CompuServe members to log on and see if they do not learn something new in sports, late-breaking news, weather or other areas.

Andy Schut  
Sparta, Mich.

## Read CompuServe News

*Online Today Daily Edition* covers the online community. Whether it's a forum conference announcement, a special promotion or a new product introduction, you can read all about it in the *Daily Edition*. To access news about the CompuServe community, type GO OLT-50 at any CompuServe Information Service prompt.

|                             |               |
|-----------------------------|---------------|
| <b>*COMPUERVE THIS WEEK</b> | <b>OLT-50</b> |
| About Update                | OLT-60        |
| Community News              | OLT-80        |
| Conference Schedules        | OLT-120       |
| Letters to Editor           | OLT-30        |
| Online Today Guide          | OLT-351       |
| Previous Weeks' What's News | OLT-270       |
| Uploads Updates             | OLT-3700      |
| What's New                  | OLT-70        |

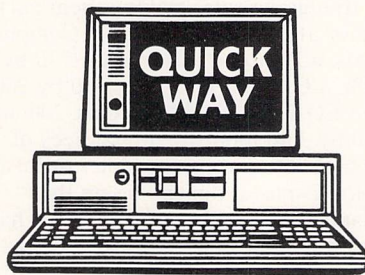


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## ComputerEyes

### *Handles Various Video Modes*

Digital Vision  
66 Eastern Ave.  
Dedham, MA 02026  
617/329-5400

**Computers:** IBM PC, PC-XT, PC-AT, PS/2 Model 25 or 30 and compatibles; other versions available for Apple II family, Commodore 64/128, Atari 800XL/130XE and Atari ST.

**Operating Systems:** PC-DOS or MS-DOS version 2.1 or higher.

**Media:** Software supplied on one 5.25-inch diskette; requires one diskette drive.

**Copy Protection:** None.

**Required Peripherals:** Color or monochrome monitor with video adapter (supports CGA, EGA, MCGA, VGA and Hercules adapters); video source (camera, video recorder, video-disk player or monitor-style television capable of delivering standard composite video signal).

**Other Requirements:** Minimum 384K RAM; free expansion slot in computer to install ComputerEyes plug-in card.

**Optional Items:** Hard disk recommended; applications software compatible with PIC (BSAVE), TIFF (Tag Image File Format), MSP (Microsoft Paint), PCX (PC Paintbrush) or IMG (GEM Desktop) graphics file formats.

**System used for test:** 1,024K Proteus 286GTX with two 1.2MB diskette drives, 20MB hard disk, two 15MB Sysgen DuraPak drives, ATI VIP video adapter (VGA) and NEC MultiSync monitor; running IBM PC-DOS 3.10. JVC Vidstar HR-D630U digital HQ video cassette recorder and Panasonic PV-330 OmniMovie video camera used as video image sources.

**List Price:** \$249.95 for basic ComputerEyes system; \$299.95 with special LCS/Telegraphics CGA-only TeleVision software; \$519.95 with black-and-white video camera.

*Reviewed by Ernest E. Mau*

ComputerEyes is a low-cost video digitizing system that has been around in various forms for several years. It converts video images viewable on a television to digitized images usable by a computer. Gray-scaled TIFF outputs are usable by Aldus PageMaker. Bit-mapped MSP outputs are suitable for programs accepting Microsoft Paint drawings. Bit-mapped PCX files can be

used by Ventura Publisher and other programs compatible with Z-Soft's PC Paintbrush. Bit-mapped IMG files are well-suited to the GEM Desktop environment.

The current ComputerEyes differs from earlier versions in that it supports VGA display modes, 320 by 200 pixels (Mode 19) and at 640 by 480 pixels (Mode 18) with high contrast black-and-white, dithered or solid intensity levels. VGA images can have up to 64 shades of true gray-scale, making them particularly attractive. Of course, ComputerEyes still supports Hercules (720 by 348), CGA (320 by 200 or 640 by 200) and EGA (320 by 200, 640 by 200 and 640 by 350) modes, with choices of high contrast, dithered, solid or false color displays, depending on the adapter and resolution. It doesn't handle true color images, however.

The system consists of both hardware and software. A plug-in card provides the interface to a video source and the software controls image viewing, image quality and file handling.

The half-length card plugs into an expansion slot in the computer. It should run as delivered, and an onboard DIP switch has to be reset only if there is an addressing conflict with some non-standard interface adapter.

Three coaxial cables extend through the back of the computer. One marked "V" has a female RCA connector for the external video source. Plug in the composite video output from a video recorder, video-disk player, video camera or television monitor. Normally the video signal would be NTSC compatible, but ComputerEyes has provisions for European standard PAL/CCIR or SECAM video sources.

The "M" cable's male RCA connector can plug directly into the input jack of a composite monitor, while the "C" cable's male RCA connector can plug into a CGA, EGA or similar video adapter card. These cables allow viewing the video input while setting up an image capture. Note that typical VGA adapters don't have a jack for the "C" cable so input viewing must be done with a separate composite monitor connected to the "M" cable.

ComputerEyes' menu-driven software is easy to install, configure and operate. It provides brightness and contrast control either via manual adjustment or automatic calibration to the video input. It also allows graphics modes, resolutions and display styles to be changed quickly. And it provides fast six-second or slow 12-second video

scanning with four choices of capture phases to minimize jaggedness in digitized images.

Fast scanning is fine for setting brightness and contrast, but it doesn't provide the image quality I want. Slow scanning gives the best quality, but 12 seconds can be a long time to wait.

With ComputerEyes, digitized "raw" data are independent of the video adapter, resolution or display style. Whether manipulated immediately after capture or saved to disk and retrieved later, the user can make one capture and experiment at leisure with different adapter choices, resolutions and display styles. CGA modes are too rough for my liking, though they can make interesting abstracts. EGA modes are better but remain coarse because of limited EGA display capabilities. VGA modes, however, are surprisingly good. There's some loss, but VGA displays retain acceptable detail, attractive shading and a feeling of crispness far beyond the other modes.

There were a couple of unpleasant surprises, but both were faults of other programs. PCX files prepared by this system sometimes were troublesome when taken into PC Paintbrush, which occasionally changed the color from black to something else or made a faint gray image almost impossible to print. The Inset System's HiJaak program I use to prepare GIF illustrations for *Online Today Daily Edition* has VGA palette recognition problems and always converts VGA (but not EGA) ComputerEyes screens to false colors instead of black-and-white or gray-scaled pictures.

Still, ComputerEyes is impressive, especially at its price. While I might wish for the impossible in faster scanning and finer EGA displays, ComputerEyes does a respectable job, and I plan to get plenty of use from it.

*Ernest E. Mau, a full-time, free-lance writer and Online Today reviews editor, is based in Aurora, Colo. He is the author of books and articles on microcomputer products and applications.*

## Go Online for More Hardware Reviews

The following hardware reviews are available this month in *Online Today Daily Edition* (GO OLT-220).

**SupraModem 2400 External Modem Manufacturer:** Supra Corp.  
**Computers:** Must have serial port.



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**Eureka: The Solver*****Solves Mathematical Equations on the Macintosh***

Borland International  
4585 Scotts Valley Dr.  
Scotts Valley, CA 95066  
408/438-8400

**Computers:** Apple Macintosh family including Macintosh II, Macintosh SE, Macintosh Plus and Macintosh 512K; version for IBM-compatible computers also available.

**Operating Systems:** Macintosh operating system.

**Media:** Requires one 3.5-inch disk drive.

**Copy Protection:** None.

**Required Peripherals:** One 800K disk drive, two 400K disk drives or a hard disk; mouse.

**Optional Items:** Second disk drive; printer; coprocessor.

**System used for test:** Apple Macintosh Plus with one 3.5-inch disk drive and a hard disk; Apple ImageWriter printer on Appletalk network.

**List Price:** \$195

*Reviewed by Brian D. Monahan*

Eureka: The Solver is designed for those in the scientific, engineering, business or financial communities who need fast, reliable solutions to real-world mathematical problems.

The four steps through which Eureka guides the user in solving a problem are typical of the steps one goes through to solve a problem without computer assistance. Those steps are editing (creating the equation), solving (finding a solution), verifying (proving that the solution is correct) and reporting (printing the results).

Getting started with Eureka is easy because the program requires no installation. All Eureka projects begin with the preparation of an equation file using standard Macintosh editing techniques, and the manual provides an overview of those techniques for those unfamiliar with them.

First, you enter an equation or a series of equations into a problem text window, one per line in standard mathematical notation with a few special symbols. The carat symbol, for example, is used for exponentiation, so  $x^3$  would indicate that  $x$  is being cubed or raised to the third power.

Eureka enables you to enter comments next to an equation. Comments are preceded with a semicolon or surrounded by brackets. They are a good

way to document an equation file.

Once the equations have been entered, click on "solutions" and select the Solve command. Eureka will look directly and then iteratively for a solution. To search iteratively means to check all possible values until a solution is found, so Eureka iterates by modifying current values and then checking to see if the modified values yield the desired function value. While Eureka searches for an answer, a progress window appears on the screen. When Eureka reaches a satisfactory result, the progress window disappears and the answer appears. You can verify the solutions, draw a graph, or generate a report for on-screen display or printout to paper.

The ability to graph functions is one of Eureka's most attractive features. Any equation that contains at least one user-defined function can be graphed. From a "graph settings dialog box," you just specify the function Eureka is to graph, the  $x$  and  $y$  axis endpoints and any labels on the axes. Once a graph has been displayed, it is possible to examine a region on the graph more closely by using Eureka's "Zoom In" icon. An excellent example in the tutorial leads the user through the use of Eureka's graphing capabilities to determine whether a previously solved equation has any additional roots.

A number of advanced features are available in the program. It is possible, for example, to override most of the program's defaults. The default length for a solved variable can be increased or decreased to eight digits. When the program uses the trial option to search for a solution, the value at which it starts searching can be set. Instructions also are provided for writing Turbo Pascal programs to produce files that can be loaded into Eureka.

The manual is a professional-looking, 300-page document. It begins with an excellent tutorial. Numerous illustrations showing screen displays make it easy to follow while trying out the program. The tutorial is followed by a description of the program's features and then by a chapter on tips and techniques for modeling.

The manual also includes several solved problems. Examining those problems gives excellent insights into Eureka's power. If you run into a problem that the manual can't help you solve, online support for Eureka and other Borland products is provided by the company through CompuServe's Borland International Forum (GO

BORLAND). A free CompuServe startup kit is provided with the program.

Eureka: The Solver will prove invaluable for those who work with mathematical equations on a regular basis.

*Brian D. Monahan is associate vice president of Iona College in New Rochelle, N.Y. His CompuServe User ID number is 70007,3000.*

**Go Online for More Software Reviews**

The following software reviews are available on *Online Today Daily Edition* by typing GO OLT-230 at any CompuServe Information Service prompt. Many daily-edition software reviews are supplemented with GIF graphics that may be viewed in or downloaded from Library 6 of the *Online Today Readers' Forum* (GO OLTFORUM).

**DeskWorks Desk Accessories**

**Manufacturer:** Styleware Inc.

**Computer:** Apple IIGS.

**PaperClip Publisher**

**Desktop Publisher**

**Manufacturer:** Batteries Included Inc.

**Computers:** Commodore 64 and 128.

**WordStar 2000 Plus, Release 3,**

**Word Publisher**

**Manufacturer:** MicroPro International

**Computers:** IBM compatibles.

**PC Quintet Integrated Software**

**Manufacturer:** Timeworks Inc.

**Computers:** IBM compatibles; Tandy.

**TurboCAD 1.5**

**Computer-aided Design**

**Manufacturer:** Milan Systems America

**Computers:** IBM compatibles.

**dbVista Database Programming**

**Manufacturer:** Raima Corp.

**Computers:** IBM compatibles.

**FastBack Plus 1.01 Disk Backup**

**Manufacturer:** Fifth Generation Systems Inc.

**Computers:** IBM compatibles.

**Concurrent DOS 386**

**Operating System**

**Manufacturer:** Digital Research Inc.

**Computers:** IBM PS/2 Model 80, Compaq Deskpro 386 or compatible.

**DOS HELP! and Tech HELP!**

**Online Aids**

**Manufacturer:** Flambeaux Software

**Computers:** IBM compatibles.

**QuickTran File Transfers**

**Manufacturer:** Eidolon Technologies

**Computers:** IBM compatibles.



## Pageview

### Enhances Microsoft Word Documents

Microsoft  
16011 N.E. 36th Way  
Box 97017  
Redmond, WA 98073-9717  
800/426-9400 or 206/882-8088  
(Washington and Alaska)

**Computers:** IBM PC, PC-XT, PC-AT, PS/2 and compatibles.

**Operating System:** PC-DOS or MS-DOS version 3.0 or higher.

**Media:** Available on 5.25-inch and 3.5-inch diskettes; requires two diskette drives or one diskette drive and a fixed disk.

**Copy Protection:** None.

**Required Peripherals:** Graphics monitor with CGA, EGA, Hercules or compatible video adapter.

**Other Requirements:** Minimum 512K RAM; Microsoft Word 4.0 or Windows Write required for text preparation; Windows 2.x or Windows/386 required for graphics insertion.

**Optional Items:** 640K RAM is recommended; mouse pointing device is optional.

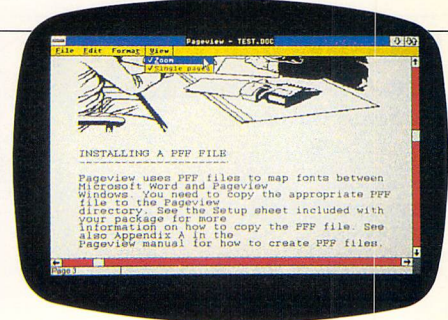
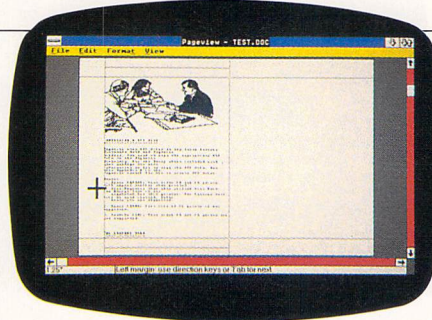
**System used for test:** 640K Compaq Deskpro 286 with 1.2MB diskette drive, 360K diskette drive, 40MB hard disk, Vega VGA video adapter, NEC MultiSync II monitor, Microsoft Mouse and Hewlett-Packard LaserJet Plus printer; running MS-DOS 3.3 with Microsoft Word 4.0 and Windows 2.03.

**List Price:** \$49.95 (coupon included to save \$50 on Windows 2.x or Windows/386).

*Reviewed by Harry Green*

"What you see is what you get" has always been the ideal in word processing, but few programs have achieved it in practice. Microsoft Word comes close, but if you use a proportional type font or one smaller than 10 pitch, you must use the printer display option to determine where lines end, and this extends lines beyond the screen's edge. Furthermore, large type fonts can't be distinguished from normal text except by looking up the format in the character menu, and multiple columns aren't displayed.

Pageview 1.0 is a formatting program that works under Microsoft Windows and operates on Word or Windows Write files to give true WYSIWYG processing. Besides letting you view a page as it will appear on paper, Pageview also lets you integrate text with



Full-page display enhances documents: Pageview

any graphics image you can save to the Windows Clipboard, including figures produced by Windows Paint, Lotus 1-2-3, Microsoft Chart, Microsoft Excel and Paintbrush. It also enables you to change page breaks and reset margins without reverting to the word processor.

Pageview requires Windows 2.x or Windows/386, which give an MS-DOS computer the icons, mouse pointers and operating system interfaces that resemble those of an Apple Macintosh. A runtime version of Windows is included with Pageview, but the MS-DOS Executive feature is omitted, so you can't use it to access other programs such as Word. The runtime Windows has just enough to make Pageview operate, but it does include the Clipboard, printer spooler and control panel for changing screen colors and patterns. The full Windows program is needed to integrate text and graphics, however.

When Pageview is started, the Windows screen is divided into two facing pages. Documents can be loaded from any Word or Write file, and Pageview shows how pages break and lines end. The display is too condensed to read the document, however, so you must select the zoom function from a pull-down menu to see the details. Pageview supports Word's printer drivers and reads style sheets from the original document. The effects of proportional spacing are shown on the screen, so all line and paragraph endings appear exactly as they will in the printed product.

The zoom feature has only two states. One is too condensed to read detail; the other is too large to display an entire line without scrolling from side to side. Scrolling is facilitated with Windows' scroll bars, which quickly shift the display, but Pageview would be greatly improved if it could zoom just a little less so you could see the entire width of a 12-pitch line. A menu option lets you jump to any page in the document. You also can toggle to a

one-page display to get somewhat more detail, but the only way to read the document is by zooming all the way into it.

Graphic images are easily inserted into the text and printed. To insert an image, first load or create the image with a graphics program and use the cut or delete feature to save it to the Windows Clipboard. Then call Pageview and load the desired document. From a pull-down menu, select an option to insert blank space for the image and another option to size it. Finally, select the paste command from the menu, and the image appears where you specified. You can move the image, size it or cut portions of it. If you print the document with Pageview, the image prints with it, but if you print the document with the word processor, the space closes and the graph is omitted.

If you know how to use Windows, Pageview is easy to learn. Its commands follow Windows conventions, and they work quickly and easily.

If you're a Word user, I wouldn't recommend Pageview without the full Windows program. Otherwise, you can't insert graphics, which eliminates Pageview's biggest benefit. For ordinary printing, Word's repaginate feature enables you to view and change page breaks or reset margins, so you don't need Pageview for those operations. Pageview does give you the convenience of seeing changes in type style, but the Windows display pre-empted three lines of text and requires sideways scrolling to read entire lines.

Pageview's real service is its ability to integrate graphics into Word documents (you can already do that with Write). If you have that need, Pageview is an inexpensive and useful addition to Word, and it's one I hope will be incorporated into the next Word release.

*Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications to improve productivity. His CompuServe User ID number is 70007.431.*



## InfoHost 3.01:

### *An Online Information System for Small Businesses*

A-Comm Electronics  
377 Route 17 South  
Hasbrouck Heights, NJ 07604  
201/288-7885

**Computers:** IBM PC, PC-XT, PC-AT, PS/2 and compatibles.

**Operating Systems:** PC-DOS and MS-DOS version 2.0 or higher.

**Media:** One disk drive required.

**Copy Protection:** None.

**Required Peripherals:** From one to eight COM ports and Hayes-compatible modems.

**Other Requirements:** 256K to 320K RAM, depending on number of COM ports.

**Optional Items:** None.

**System used for test:** 640K IBM PC with 20MB hard disk, 360K diskette drive and USRobotics Courier 2400 modem; running PC-DOS 2.1.

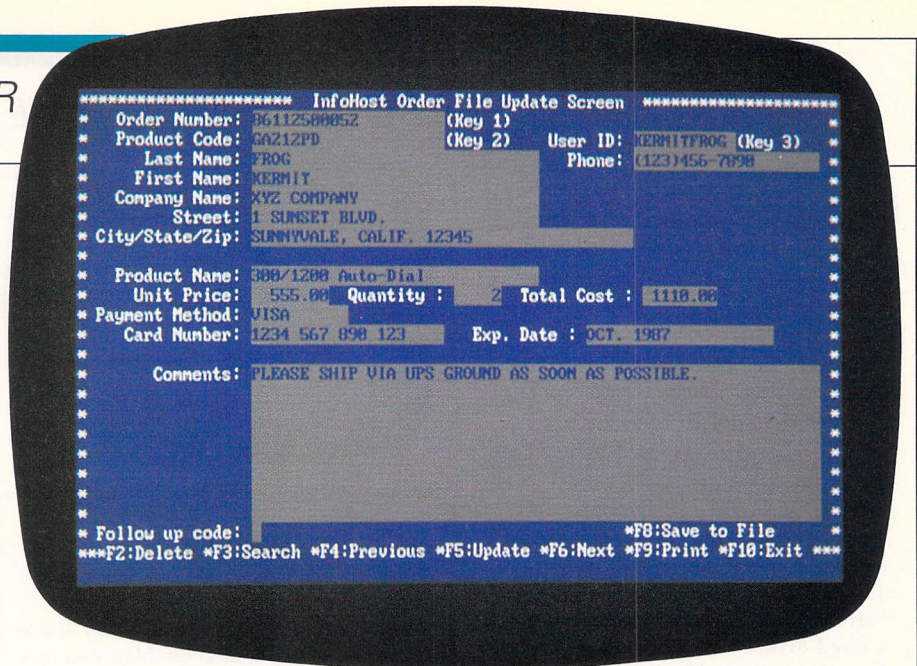
**List Prices:** InfoHost/Demo, \$49; InfoHost/2B (two ports, basic functions), \$295; InfoHost/2S (two ports), \$495; InfoHost/2A (two ports, advanced functions), \$795; InfoHost/8S (eight ports), \$695; InfoHost/8A (eight ports, advanced functions), \$995.

*Reviewed by James Moran*

Small businesses no longer restrict their computers to accounting tasks. As their sophistication increases, they're beginning to see the potential in telecommunications facilities. By combining inexpensive modems with appropriate software, even a single-person operation can implement a service-oriented program for customers.

InfoHost (version 3.01) is a new release of a multiuser system that combines a communication interface with an integrated relational database that can be customized by the user. The resultant online information system can be used for technical support, order processing or any service that requires user interaction with an informational database.

InfoHost installs quickly, and a developer-supplied procedure keeps the operation simple. Various versions handle from three to nine users, but the larger configurations require that a multiport adapter be installed on the IBM PC. Since InfoHost is installed only on the host computer, incoming callers don't need special software, and any ASCII terminal or communications-



Service-oriented program maintains customer contact: InfoHost

capable IBM PC can connect with an InfoHost system.

More so than with any other software, quick and competent customer support is required for a product like this. If InfoHost is running your online catalog or customer order line, you want to be sure that timely help is available for even the slightest glitch.

When I reviewed an earlier version of InfoHost about a year ago, I was impressed by the telephone support. It is reassuring to know that success hasn't changed the developer's philosophy; support is just as easy to obtain now as it was then. Also, for information when the support line isn't available, users can access the developer's own InfoHost system. That access is free of connect-time charges, and it is a good place to check out a live demonstration.

The core features of this menu-driven information system are its relational database and the way it can be linked to the tree-structured menu. Each menu contains a user-created selection of options with a brief explanation. Callers follow the menu tree to reach an eventual destination within the system. At any point along the way, they may request information by invoking a Help menu.

From anywhere within the menu structure, a caller can go one level higher, one level lower or back to the main menu. Users will find that navigating through InfoHost is much like using the CompuServe menu system. The software can handle up to 20 menu levels with a maximum of 15 menus per level. For all practical purposes, that makes the number of menu selections virtually unlimited, and the system can

handle more associated detail records (4 gigabytes) than any standard IBM PC can manage.

To construct those detail records, InfoHost includes a file-management system that can create and update an appropriate database. Constructing the database is the most difficult task, but InfoHost's documentation does a good job of leading users step-by-step through the process. A comprehensive set of data templates also makes the task easier.

A number of changes and enhancements distinguish this InfoHost release from previous ones, according to the developer. Certainly the most obvious change is the speed at which the system runs. The previous version tended to be sluggish when loaded down with users, but that seems to have been solved. Even when only one other user is signed onto the system, the quicker response is noticeable.

InfoHost is suited to all types of online information applications and can be run unattended around the clock. Mini-information systems such as this are ideal for small businesses and professional offices that need to maintain customer contact but do not want to incur the overhead necessary for a large customer-support staff. The idea also lends itself to inhouse support functions for buyers, dealers, distributors and salespeople.

If you need to implement customer, product or staff support, InfoHost may be what you didn't know you were looking for.

*James Moran is a free-lance writer and frequent contributor to Online Today. His CompuServe User ID number is 70007,2253.*



## Harvard Graphics:

### *An Elite Business Graphics Package*

Software Publishing  
1901 Landings Dr.  
P.O. Box 7210  
Mountain View, CA 94039-7210  
415/962-8910

**Computers:** IBM PC, PC-XT, PC-AT, PS/2, 3270 PC; AT&T 6300; Compaq; Epson Equity I, II, III; Leading Edge Model D; Tandy 1200 HD, 3000; Toshiba T3100; Panasonic Partner series; Zenith Z-158, Z-200; Olivetti M24.

**Operating Systems:** PC-DOS or MS-DOS version 2.0 or higher.

**Media:** Supplied on six 5.25-inch diskettes and three 3.5-inch PS/2 diskettes; requires two diskette drives or one diskette drive and a hard disk.

**Copy Protection:** None.

**Required Peripherals:** Printer (supports numerous dot-matrix, inkjet and laser printers); monitor and Hercules, CGA, EGA, VGA, Video 7 Vega Deluxe or Quadram graphics adapter.

**Other Requirements:** Minimum 512K RAM; hard disk required with 5.25-inch drive system.

**Optional Items:** Pen plotter; film recorder; mouse or other pointing device.

**System used for test:** 1,024K TeleVideo TeleCat-286 computer with Hercules Graphics Card Plus, two diskette drives, Control Data 40MB hard disk, Okidata Microliner 293 printer and Hewlett-Packard LaserJet Series II printer; running PC-DOS 3.3.

**List Price:** \$395

*Reviewed by William J. Lynott*

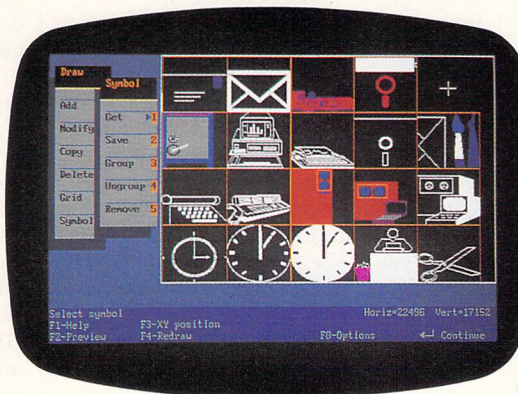
Personal computing has come a long way in producing presentation-quality visuals on paper, overhead transparencies or 35mm slides. From crude beginnings with text and icons generated for output to nine-pin dot-matrix printers, microcomputer-generated graphics are now all but indistinguishable from those produced in professional studios. With a top software package and a laser printer, even a no-talent klutz can produce reasonably good business graphics.

Harvard Graphics version 2.10 (called Harvard Presentation Graphics in its original version) is among the elite of graphics software. It combines a high degree of control over its output

while offering users the option of sitting back and letting the software make choices for the best presentation of data or text. A freehand drawing feature can further enhance your work.

Among many new features in version 2.10 are 200 additional symbols to liven up text charts and the ability to export charts, graphs and symbols directly into desktop publishing programs such as Ventura Publisher and Aldus PageMaker.

A novel inclusion in this graphics



**Presentation-quality:** *Harvard Graphics*

package is a spelling checker that proofreads and corrects text, not just in text charts but in titles, legends and other areas in all kinds of charts. The spelling checker can accept a word as written, provide alternative words or accept a typewritten correction, entering fixes directly into the chart.

You can tell that you have a serious graphics program as soon as you open the Harvard Graphics package. Six 5.25-inch diskettes (or three 3.5-inch disks) hold this huge program and all its options and features. The hardcover users manual is beautifully organized and well-written. It begins with a brief introductory section that starts with a demonstration of how easily you can create custom graphics. From there, the manual is tightly organized by specific functions. Want to create a bar chart? Just turn to the section titled "Creating Bar/Line Charts."

The same goes for all other types of graphics. There is a separate section for each type of text chart or graph that Harvard Graphics can produce, and it can produce them all. For overheads or 35mm slides, you can produce an almost unlimited variety of text charts, bulleted lists or freeform text. You can lay out text in up to three columns and enhance it with bar/line

charts, pie charts with or without "exploded" slices, histograms, area charts, organization charts, scatter graphs or high-low-close charts, to name a few.

Although Harvard Graphics can be used with two 3.5-inch disk drives, a hard drive takes advantage of the program's speed and ease of operation. Installation on a hard drive requires only that you put a utilities disk in drive A and type "install." From there, the program prompts for all needed information.

Harvard Graphics' main menu provides a good illustration of the program's capabilities and ease of use, presenting 10 choices: Create New Chart, Enter/Edit Chart, Draw/Annotate, Get/Save/Remove, Import/Export, Produce Output, Slide Show Menu, Chartbook Menu, Setup and Exit. You can use cursor highlighting or keyboard entries for making menu selections, but Harvard Graphics also supports a mouse as a pointing device.

All principal functions of Harvard Graphics are menu-driven. If you want to change a graph's appearance, by relocating the series legends or changing the size of title type, for example, you'll be guided through the options by an easy-to-follow menu.

A particularly sophisticated feature called Slide Show enables you to put on a complete desktop presentation, displayed on the computer screen. Slide Show also prepares "batch" output to convert your material to hard copy with a printer or plotter. With a little imagination, Slide Show can turn out highly polished presentations of boardroom quality.

I haven't been disappointed by a single chart or graph printed on my LaserJet Series II printer. Fill patterns for bar charts are crisp and sufficiently varied to avoid confusion. Options for layout and presentation of all output are almost as varied as those possible from the cut-and-paste method of design. The same full control offered in monochrome mode is maintained during color operations.

If you need to prepare quality graphics for business presentations, Harvard Graphics probably is all the software you'll ever need. Its wealth of features and great flexibility place it squarely among the best of its kind.

*William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.*



## 1st Word Plus:

### A GEM/3-Compatible Word Processor

Digital Research  
70 Garden Ct.  
P.O. Box DRI  
Monterey, CA 93942  
408/649-3896 or 800/443-4200

**Computers:** IBM PC, PC-XT, PC-AT, PS/2 and compatibles.

**Operating Systems:** PC-DOS or MS-DOS version 2.1 or higher.

**Media:** Total package (including GEM/3 Desktop, GEM Paint, GEM 1st Mail and 1st Word Plus) supplied on nine 5.25-inch diskettes; also available on five 3.5-inch diskettes; fixed disk is required.

**Copy Protection:** None.

**Required Peripherals:** Fixed hard disk; monochrome, CGA, EGA or VGA video adapter with monitor (VGA-mode displays are supported).

**Other Requirements:** Minimum 512K RAM.

**Optional Items:** 640K RAM; mouse-type pointer; printer; color monitor.

**System used for test:** 512K Victor V286 computer with 20MB hard disk, color monitor, EGA video adapter and Apple LaserWriter printer; running MS-DOS 3.2.

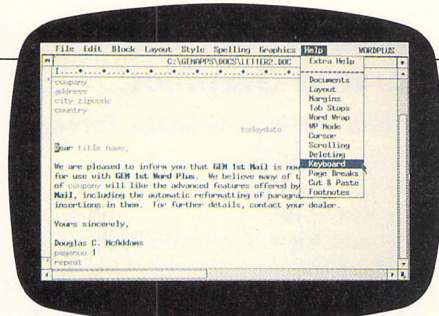
**List Price:** \$199.95

*Reviewed by Franklyn Jones*

GEM 1st Word Plus is an icon-oriented, mouse-driven word processor built around the GEM/3 Desktop environment. If you're attracted to the Macintosh computer, Microsoft Windows or the like, you may feel at home with 1st Word Plus. However, if your computing experience has been in conventional IBM PC-based software, you'll likely encounter a learning curve with the GEM/3 environment as a whole as well as with 1st Word. Even though I have experience in both Macintosh and IBM PC environments, I still found this program somewhat difficult to learn and use.

To begin, you need to run a setup program that creates a GEM directory on disk, five other subdirectories and a batch file to load GEM/3 from the root directory. During installation, you can select from a variety of drivers for printers, plotters and monitors. Digital Research offers additional optional device "driver packs" on disk for \$5 each.

In separate tests by the *Online Today's* reviews editor, GEM/3 Desktop (version 3.0) would not install directly



Mouse-driven word processor: 1st Word Plus.

on software-controlled, removable-media drives such as IOMEGA Bernoulli Boxes or Sysgen DuraPaks. GEM/3 Desktop doesn't recognize those as acceptable installation destinations. A preliminary version 3.1 was supposed to fix the problem but didn't, so users of similar drives must approach GEM/3 applications cautiously.

Once the system is loaded, the GEM/3 Desktop appears on the screen, where you'll see, in icon form, a list of all available subdirectories and associated files on disk. Files can be loaded from any subdirectory. Because it isn't possible to open files such as printer drivers, I'm not sure why they all are displayed on screen. It would make more sense to display only document and executable files.

The 1st Word Plus program is an application file that can be opened with a couple clicks of a mouse button. Once inside 1st Word Plus, all commands are organized in pull-down menus across the top row. A separate window below the document area displays the entire ASCII character set. Apparently, any extended characters can be inserted into a document when needed. Fortunately, the program's default settings can be modified to eliminate that chart.

Once familiar with relying on a mouse for command execution, you'll find 1st Word Plus fairly complete in overall functionality. For example, it offers support for headers, footers, search-and-replace operations, footnoting, style sheets, cut-and-paste operations, spell checking, graphics integration, mail merging, a pop-up calculator and the ability to edit documents in four separate windows, each of which can be sized and moved.

In addition, what-you-see-is-what-you-get capabilities feature an on-screen display of justification; bold, italic and underlined text; and the extended ASCII character set. (Incidentally, files can be stored in either GEM format or standard ASCII files.) One of my favorite features is the Statistics

command, which dynamically displays the current length and size of the active document, plus the remaining space in memory and on disk.

Unfortunately, the attractive features are largely negated by the program's many shortcomings. Here are several to be aware of: There is no apparent support of multiple columns on screen or in hard copy. There is no conversion facility for importing document files from other popular word processors except WordStar. The entire package with 1st Word Plus and the GEM/3 Desktop consumes nearly a megabyte of hard-disk space. Although the program doesn't require a mouse, keyboard control makes the program painfully slow and awkward to use, but using a mouse means an additional hardware investment. And the documentation is well designed but poorly indexed and lacking in details.

Another oddity is that printing is handled outside 1st Word Plus through a separate application option within the GEM/3 Desktop. So it is necessary to leave the word processor to print a document. Although GEM/3 supports many popular printers, including Apple's LaserWriter, it offers no way to assign fonts or point sizes to characters within a document file.

The 1st Word Plus program cannot be run independently of the GEM/3 environment. Therefore, if you're interested in using 1st Word Plus, keep in mind the hardware requirements (graphics board, mouse and preferably 640K RAM), as well as the commitment you'll be making to get familiar with a proprietary operating environment. Although Digital Research offers related GEM products, you will likely discover some incompatibility problems when trying to work with "foreign" applications under the GEM environment.

*Franklyn Jones was formerly the managing editor of Interface Age magazine and editor-in-chief of IBM PC Update magazine. He has written articles for various computer publications, is a regular contributor to Online Today and serves as a marketing and communications consultant.*



## Proteus

### Creates Software Prototypes

Helios Software  
P.O. Box 22869  
Seattle, WA 98122  
206/324-7208

**Computers:** IBM PC, PC-XT, PC-AT, PS/2 and compatibles.

**Operating Systems:** PC-DOS or MS-DOS version 2.0 or later.

**Media:** Supplied on two 5.25-inch diskettes.

**Copy Protection:** None.

**Required Peripherals:** Color video adapter and monitor strongly recommended.

**Other Requirements:** Minimum 256K RAM.

**Optional Items:** None.

**System Used for Test:** 2MB AST Premium/286 computer with 80287 math coprocessor, Genoa SuperEGA HiRes Video Adapter, Sony Multiscan monitor, 80MB hard disk and Logimouse C7 mouse; running MS-DOS 3.2 at 10 MHz.

**List Price:** \$99



*Reviewed by Hardin Brothers*

Among the most unusual tools in a programmer's library are prototyping systems. These programs create a demonstration or prototype of a program and its user interface. Programmers often make one or more such prototypes to present to a client or supervisor for approval before any program code actually is written.

The Proteus Prototype/Demo System (version 3.0) is such a system. With it, a software developer can create screens and menu systems, demonstrate how a program will work and develop simple on-screen slide shows. Proteus provides a simple way to move programming ideas from paper to screen without spending the time to write extensive program code.

Using Proteus is a process of creating a series of slides, each of which is a screen or portion of a screen, and defining how those screens should be manipulated when the prototype is run. Proteus stores related screens with their manipulation instructions together in a single file that can be accessed by a special "rundemo.exe" program. You can distribute both slide files and "rundemo.exe" to whomever you wish.

Proteus itself contains three modules. The first is a simple database that lets a programmer define slides and manipulation directions, change the

### Programmers' Prototypes: Proteus

order of slides in a prototype file and import or export slide sets from one file to another. This portion of Proteus generally is easy to use.

The second module is a debugger that lets a programmer move through a series of slides to see if a demonstration is working correctly. It is essentially the same as "rundemo.exe" but adds single-stepping control and can be called from inside Proteus.

The third and most important module provides a set of paint commands for creating slides. All Proteus slides are character-based, which means that any graphic designs must be created with color blocks and extended ASCII characters. The paint module uses two keyboard mappings: the normal keyboard characters and a subset of the extended ASCII character set. Characters from either mapping can be typed on the screen, and the keys remapped to any ASCII character at any time.

Creating a slide is mostly a matter of moving the cursor around the screen, typing characters and moving character blocks to make the screen look the way you want it. This quickly becomes a tiring exercise, although Proteus' commands are about the same as those in other character-based

screen designers I've used. Proteus' biggest weakness seems to be with text insert and delete commands, which have the effect of destroying any screen or block borders already drawn.

At all times, Proteus has context-sensitive help available, plus pop-down menus that activate various drawing commands. The menus can be avoided with Control and Alternate key combinations, but those are hidden in the back of the manual. Proteus would be easier to use efficiently if Alternate key commands were shown beside each option in each menu or on a quick reference card.

Proteus' 130-page spiral-bound manual is clear but somewhat disorganized. The Alternate key commands are used throughout the tutorial but not listed until an appendix. Much of the tutorial focuses on the way slides can be manipulated. For example, each slide in a demonstration program has an associated action list that defines how long the slide should stay on the screen and which slide should be shown next.

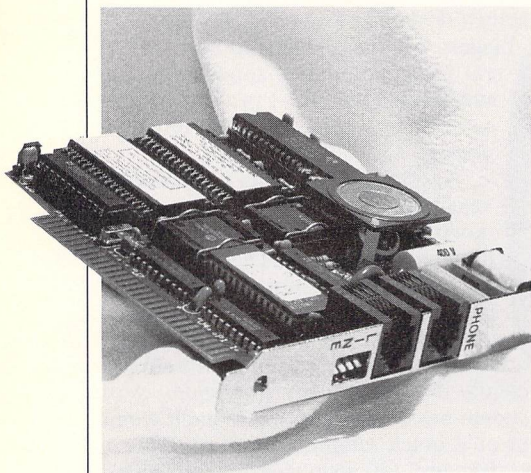
You can instruct Proteus to move from one slide to another depending on keys a user presses, define input and output buffers that accept and print strings the user types, and create small slides that overlay portions of the screen. You also can chain from one slide file to another. Proteus does not contain a full programming language, but it has sufficient capability to create almost any kind of prototype demonstration you might need.

Proteus can save screens in four formats: the internal format used by "rundemo.exe," BASIC's BLOAD format, a text format compatible with most word processors and a special format that can be read and displayed by almost any programming language. It also can capture screens from other programs, so you can create demonstrations of software already written.

Although a useful tool, Proteus would be better if it had a mouse interface and a quick reference card. Still, it is much easier to design a program prototype with Proteus than it is to create the same screens in any standard programming language. If you need to present ideas on a computer screen before you start coding a program, Proteus is handy to have.

*Hardin Brothers is a writer, computer programmer and teacher living near Los Angeles. He is a frequent contributor to several computer magazines. His CompuServe User ID number is 72165,735.*





## Internal Modem for IBM PCs

The Correspondent DT-2400 and Correspondent DT-2400EC from Holmes Microsystems are 2400-baud internal modems for the IBM PC-XT, PC-AT, PS/2 and compatible computers.

Features of the Hayes-compatible modems include 300-, 600-, 1200- and 2400-baud, auto-dial and auto-answer. Users can upgrade the units to 4800 and 9600 baud. The DT-2400EC model adds error-correction capabilities. Included with both modems free of charge is Mirror II software with a complete PC-AT command set.

For information, contact Holmes Microsystems, 2620 South, 900 West, Salt Lake City, UT 84119; 800/443-3034 (nationwide) or 801/975-7728 (in Utah).

## Carbon Copy Plus Communications

A remote-control communications software package for the IBM PC-XT, PC-AT, PS/2 and compatible computers has been introduced by Meridian Technology.

Called Carbon Copy Plus 5.0, the program features background file-transfer capabilities and a Universal Graphics Translator function that fully supports EGA, VGA, Hercules, CGA and other graphics cards. It enables users on both ends of the Carbon Copy Plus link to see and interact with the same graphics screen images, including updates and image saves. The retail price is \$195. Registered owners of earlier versions can upgrade for \$50.

For information, contact Meridian Technology, 1140 Hammond Dr., Suite A-1125, Atlanta, GA 30328; 404/390-9152.

## Fastback Plus Backup Utility

Fifth Generation Systems has introduced Fastback Plus (version 1.01), a high-speed backup utility for the IBM PC-XT, PC-AT, PS/2 and compatible computers.

Enhancements in this version in-

clude increased speed, improved DMA testing, greater PS/2 compatibility and enhanced error correction. Registered users of version 1.00 will automatically receive the new version without charge.

For information, contact Fifth Generation Systems Inc., 1322 Bell Ave., Suite 1A, Tustin, CA 92680; 800/225-2775 or 714/259-0541.

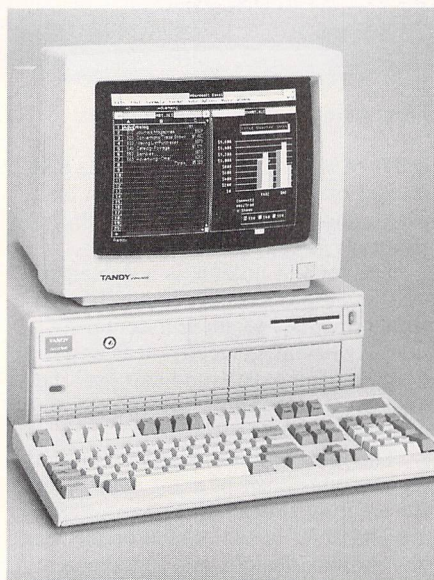
## Vaccine Detects 'Viruses'

Vaccine from WorldWide Data is a toolkit containing a Vaccine program and two other utilities, Antidote and Checkup.

Vaccine is a resident program that automatically and transparently checks an IBM PC-XT or PC-AT for computer viruses. It will not permit any program to remain in memory unless its name is declared "legal" to Vaccine. Antidote

scans a disk for all viruses known to WorldWide Data and notifies the user if any of them appear to have attacked any programs. Checkup keeps a record of the state of the system and informs the user if any executable files have been changed since the last time Checkup was run. The retail price is \$79.95.

For information, contact WorldWide Data Corp., 17 Battery Pl., New York, NY 10004; 800/643-3000, ext. 123 (credit card and COD orders only) or 212/422-4100.



## Tandy 5000 Personal Computer

Tandy has introduced its most powerful personal computer, the Tandy 5000 MC desktop microcomputer.

Operating at 20 MHz, this Intel 80386-based desktop computer uses a high-speed memory cache controller and features video graphics array and IBM Micro Channel-type architecture. Operating environments for the 5000 MC range from the single-user MD-DOS 3.3 operating system to the multi-user SCO XENIX 386 and multitasking Microsoft OS/2 operating systems. The retail price is \$4,999 for the base system and \$6,499 for a 40MB hard-drive version.

For information, contact your local Radio Shack Computer Center or Radio Shack Plus Computer Center.

## MacTell Communications Software

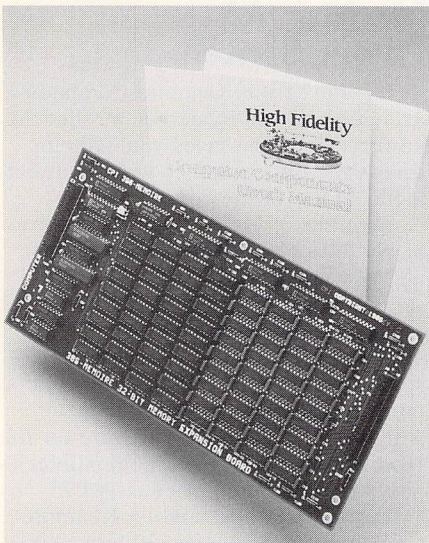
Baseline has introduced MacTell 3.3, the first international full-featured communications software package for the Apple Macintosh.

The new version gives users access to more than 6,000 Minitel services available around the world in addition to the American ASCII services.

MacTell remains the only Macintosh software program with Minitel emulation available in the United States. The file server has been improved to make file transfers less complicated. Files can be sent to the host without protocols and the file server now automatically assigns unique names to incoming files.

For information, contact Baseline Inc., 838 Broadway, New York, NY 10003; 212/254-8235 or 213/659-3830 (in California).





### Compaq Memory Board

The 386 Memoire from Computer Peripherals is a 32-bit memory expansion board for the Compaq DeskPro 386.

The unit supports up to 2MB of high-speed, parity-checked memory and is specially designed to fit the 32-bit memory expansion slot on the Compaq machines. It provides twice the performance of traditional 16-bit AT-type memory boards. The 386 Memoire comes with 1MB soldered on the board and is socketed for upgrades to 2MB capacity. The retail prices range from \$695 to \$1,145.

For information, contact Computer Peripherals Inc., 667 Rancho Conejo Blvd., Newbury Park, CA 91320; 800/854-7600 (nationwide) or 805/499-5751 (in California).

### Memory Lane Text Retrieval

Memory Lane 2.0 from Group L combines the features and speed of an advanced full-text retrieval system with the convenience of a personal information manager.

From within any program, the user presses a "hot" key and types any word, number or phrase. In seconds, Memory Lane lists every file containing the search term in its full text, goes to the term and highlights it. The user can mark a portion of text to be copied and paste the data into a document or file. The retail price is \$149.

For information, contact Group L Corp., 481 Carlisle Dr., Herndon, VA 22070; 703/471-0030.

### Macintosh WordPerfect

WordPerfect Corp. has introduced WordPerfect 1.0, a full-featured, high-end word processor, for the Apple Macintosh.

Mac features include on-screen graphics and font changes, kerning, extensive PostScript support and a graphics page preview feature. Page preview reduces text and shows two

side-by-side pages at a time, displaying the way the finished document will look before it is actually printed. Extensive file-management capabilities are also provided. All of the program's features are easily accessible using either the keyboard or the mouse. The retail price is \$395.

For information, contact WordPerfect Corp., 288 W. Center St., Orem, UT 84057; 801/225-5000.

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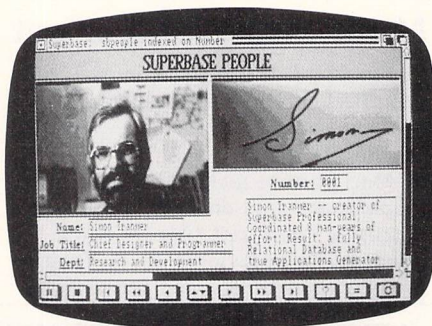


## Superbase Database Management

Progressive Peripherals & Software has introduced Superbase Professional Database Management System for the Amiga 500, 1000 and 2000 computers.

Designed as a full-fledged custom applications generator, Superbase Professional features a forms editor that works like a mini-desktop publisher and a text editor that allows integration of external ASCII text blocks of any size in the database. The retail price is \$349.95.

For information, contact Progressive



Peripherals & Software Inc., 464 Kalamath St., Denver, CO 80204; 303/825-4144.

## Mr. Mox AC Power Switch

Mr. Mox from Kenmore Computer Technologies is a modem-controlled AC power switch that gives you 24-hour access to your computer without affecting local use of the computer.

Features of Mr. Mox include four heavy-duty grounded outlets (two hot and two modem-controlled), built-in surge suppression, built-in circuit breaker, lighted on/off master power switch and more. The carrier-detect signal turns power to automatic outlets on when the local modem connects with a remote modem. Software for the IBM PC-XT, PC-AT and compatibles is provided. The retail price is \$99.95.

For information, contact Kenmore Computer Technologies, 30 Suncrest Dr., Rochester, NY 14609; 716/654-7356.

## Deluxe Option Board

Central Point Software has introduced the Deluxe Option Board, which enables IBM PC-AT, PS/2 and compatible computers to use Macintosh data disks within the PC's internal 720K 3.5-inch drive.

The unit consists of a half-sized card and software that emulates the Macintosh HFS and MFS file systems. Once installed, the PC's 3.5-inch drive is transformed into a dual-purpose IBM/Mac drive. The retail price is \$159.

For information, contact Central Point Software, 9700 S.W. Capitol Hwy., Portland, OR 97219; 503/244-5782.

## Fax Modem

The EverFax Fax modem from Everex Systems provides the functionality of a fax machine and operates as a fully Hayes-compatible, 1200-baud modem.

Selling for \$495, the EF-12/48 allows microcomputer users to exchange documents with any Group III fax machine in the world, eliminating the need for paper scanning. Microcomputer-based fax transmission produces a crisper, cleaner-looking document than conventional fax. EFax communications software is included at no extra cost.

For information, contact Everex Systems Inc., 48431 Milmont Dr., Fremont, CA 94538; 415/498-1111.

## Co/Session Remote-Access Software

Triton Technologies has introduced Co/Session (version 3.0), a program that provides the fastest text and graphics screen updates of any remote access package.

A new feature of this latest version is Voice First, which allows users to begin a support session with an ordinary phone call and voice conversation. Screen updates are as much as 400 percent faster than any remote-access package due to advanced data compression techniques. Co/Session allows two IBM PCs to work together as one or one IBM PC to remotely control another. It is designed for the IBM PC-XT, PC-AT, PS/2 and compatible computers.

For information, contact Triton Technologies Inc., 146 Maple Ave., Red Bank, NJ 07701; 201/741-3232.

## Toltran Translator Software

The Toltran System from Toltran Ltd. is a software package that allows you to write a letter in English and, in the time it takes to transmit electronically, have it delivered in another language.

The program not only translates from English into other languages, but also from those languages into each other and back again into English, making international communications more accessible than ever. The Toltran System is designed so that vocabulary can be adapted to any specialized field. Using artificial intelligence techniques, words are analyzed singly and in context to determine the appropriate meaning so the text is grammatically correct and coherent in syntax.

For information, contact Toltran Ltd., 119D Shoreline Rd., Barrington, IL 60010; 312/382-4997.

## Go Online For More Product Announcements

The following new product announcements are available this month in *Online Today Daily Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

**Utilities Plus**, five utilities to increase the computing power of the Atari ST, MichTron.

**Webster's New World Writer II**, advanced word processor with spelling checker and thesaurus for IBM, Tandy, Compaq and compatible computers, Simon and Schuster Software.

**Data Desk Professional**, data analysis and graphics software for the Apple Macintosh, Odesta Corp.

**PC Yellow Pages**, compilation of 10,000 businesses with toll-free numbers and 5,000 local businesses in each area code of the United States, Digital Publications Inc.

**ZIP Code Generator Directory**, 100,000 five-digit ZIP code directory, Wood Associates.

**PubTech File Organizer**, file and directory management system for the IBM AT, PS/2 and compatible computers, Publishing Technologies Inc.

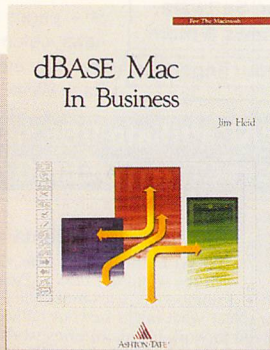
**Black Magic (version 1.20)**, hypertext word processor for the IBM PC and compatible computers, NTERGAID.

**System Sleuth**, IBM PC diagnostic software program and troubleshooting utility, CSSL Inc.



## Online Book Reviews

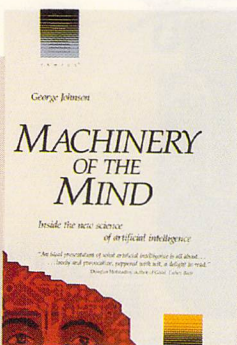
Following are summaries of book reviews available for reading this month in *Online Today Daily Edition*. To read the complete reviews, type GO OLT-240 at any CompuServe Information Service prompt.



### **dBase Mac in Business**

By Jim Heid  
Ashton-Tate Corp., 1987  
246 pages, \$12.95 (softcover)

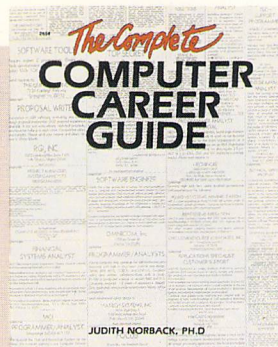
This is not a puffed-up rewrite of the user manuals, but rather an extended teaching aid for dBase Mac, says reviewer James Moran. The book covers such topics as "dBASICS," programming language, construction of custom menus and file sharing. *GO OLT-5600*



### **Machinery of the Mind: Inside the New Science of Artificial Intelligence**

By George Johnson  
Tempus Books, 1987  
352 pages, \$9.95 (softcover)

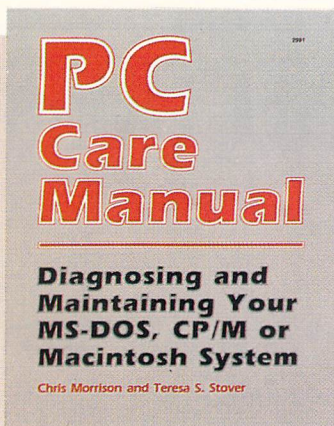
This book examines the concepts, research and discoveries of scientists who have brought artificial intelligence to its present stage of development. Reviewer James Moran says the author writes with the skill of a storyteller. *GO OLT-5620*



### **The Complete Computer Career Guide**

By Judith Norback  
TAB Books, 1987  
246 pages, \$12.95 (softcover)

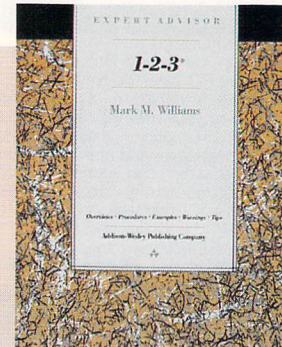
Reviewer Susan Katz says this compendium of information about training and job opportunities is an excellent handbook for high schools and community colleges. However, while the facts are plentiful in this useful reference book, the style is dry and the book is not well edited. *GO OLT-5610*



### **PC Care Manual: Diagnosing your MS-DOS, CP/M or Macintosh System**

By Chris Morrison and Teresa S. Stover  
TAB Books, 1987  
204 pages, \$16.95 (softcover)

Reviewer Franklyn Jones says this book is a repetition of most systems user manuals. And because it is geared toward three types of hardware, care and maintenance tips tend to be generic. Still, Jones deems the book to be a suitable guide for the computer novice. *GO OLT-5640*



### **Expert Advisor: 1-2-3**

By Mark M. Williams  
Addison-Wesley, 1987  
496 pages, \$19.95 (softcover)

This well-organized book contains every listing for every command and function for Lotus 1-2-3 releases 1A and 2. Reviewer William J. Lynott says it may be the only reference guide you'll need for 1-2-3. *GO OLT-5630*

## Looking for a Book Reviewed in *Online Today*?

For publishing information on the books reviewed in *Online Today Daily Edition*, type GO OLT-240 at any CompuServe Information Service prompt and read this month's reviews from the main menu. Then select Option 6, "Publishers' Addresses," for information to order the books reviewed.

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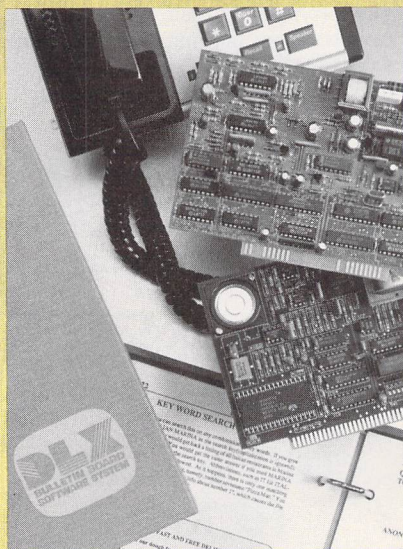
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## Guidelines to Requesting Information Through OLI

### Online Inquiry

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CompuServe Page OLI-1

### ONLINE TODAY ADVERTISERS ONLINE INQUIRY (OLI)

1. OLI Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Mini-Ads

### Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page OLI-160

### ONLINE TODAY ADVERTISERS/OLI

1. Sept. 1988 Advertisers
2. Aug. 1988 Advertisers
3. July 1988 Advertisers

### Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, GO OLI-280 and select the appropriate listing, such as September Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page OLI-280

### REVIEW LISTINGS/PRINT EDITION

1. Sept. Hardware Listings
2. Sept. Software Listings
3. Sept. New Product Listings

### Shopper's Guide

GO OLI-70 to get information about *Online Today's* mini-ad program.

To request information from Shop-

per's Guide advertisers, follow the instructions outlined in each ad.

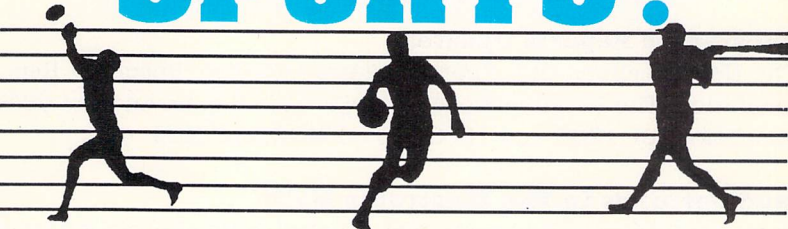
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### SHOPPER'S GUIDE

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2. Rates and Information

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## **National Forecast in Public Weather Online**

The National Forecast, a summary of expected temperatures and precipitation for six to 10 days in advance, is now available in the Public Weather database. The report includes a state-by-state table that compares the forecast to normal conditions. Normal, above normal and below normal conditions are noted. GO WEA

## **IBM Forum Opens New Section**

The IBM Communications Forum has opened Section/Library 11 to address the technical and daily operational aspects of local area networks. In addition, textfiles and LAN-specific programs are available. Section/Library 7 remains dedicated to modems and communications hardware. GO IBMCOM

## **Interactive Chess Adds Features**

Optional game timers and bell prompts have been added to CompuServe's *Interactive Chess* to improve game play and enhance tournaments. Each player can set the optional game clock for up to 60 minutes per game. The second player may play with the same time limit or a shorter time as a handicap. Bell prompts enable players to notify each other when it is their move. GO CHESS

## **Demographic Reports Updated**

The Neighborhood Gift, Sports/Leisure and Civic Specialty Reports have been updated with 1988 information. The Neighborhood Demographic Report and the US/State/County Report provide demographic information for 1980 and 1988. GO DEMOGRAPHICS

## **Grand Openings in The Electronic Mall®**

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## **Search PCExpert with Keywords**

PCExpert provides keyword-searchable information on IBM and IBM-compatible computers and software. Archived IBMNET messages, tips, tutorials, answers to common questions and descriptions of popular IBMNET library files are provided by the IBMNET forum administrators. GO PCE

## **New Navigator Version Available**

CompuServe Navigator version 2.1, enhanced communications software for the Macintosh, is now available for online ordering (GO ORDER) or upgrading. Version 2.1 offers automated access to CompuServe's 'Quick Quotes' service, enhanced dialog boxes for session set-up, the ability to update forum section and library names, and other enhancements. GO NAVIGATOR

## **One To One Electronic Edition Expanded**

*Incue OnLine* announces the expansion of *One To One Electronic Edition* beyond the Broadcast Professionals Forum. The weekly edition of *One to One* contains more material for on-air radio personalities, including DJ VU, artist profiles and promotions for on-air talent and stations. GO INCUE

## **Olympics '88 Information Online**

Olympics '88 information, including the Summer Games schedule of events and daily results, Olympics history, athlete profiles and a list of medal winners and records from the Winter Games, is available online from the US Olympic Committee, the US Olympic Training Center and The Associated Press. The Electronic Mall's Olympic Gift Shop also offers souvenirs. GO OLYMPICS

## **New Games Forums Available**

The new Play-By-Mail Games Forum and the Role-Playing Games Forum are spin-offs from The Gamers' Forum. Members can discuss and start games, talk with game authors and publishers, and participate in play-by-mail and role-playing games online. GO PBMGAMES and GO RPGAMES



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